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GAME NEWS

Volume 46 • No. 1
JANUARY, 1975

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COVER PAINTING BY RANDY ROWE

The raven is an opportunist in the truest sense of the word. This big black bird feeds on almost anything edible, including carrion, garbage, insects, small mammals and birds, eggs, fruit and grain—in short, whatever is available. Found mainly in the northcentral part of Pennsylvania, and occurring infrequently in other sections of the state, the raven can be distinguished from the crow by its larger size, its hoarse, croaking call, and its wedge-shaped tail. Unlike the crow, the raven often sails and soars high in the sky with its wings held out like a hawk's.

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When The Red Gods Smiled

IT SEEMS REASONABLE TO ASSUME that most persons who work in the outdoor writing field grew up reading books and magazines devoted to outdoor subjects. I did, and everyone I know in the business did. As literature, outdoor writing might not rank with *War and Peace,* but at its best it's outstanding and even at its worst it's better than a lot of stuff being published these days. Perhaps one of its most worthwhile values is that parents don't have to worry about letting even young children read it. Not only is outdoor writing clean, but there's also an invaluable teaching effect, usually unintentional on the writer's part but nevertheless inevitable as he shows a human involved in some close relationship with nature and wildlife.

I mention all this because six or eight months ago, when I was pondering a new series to follow Seth Gordon's, I happened to recall some bits and pieces from an article I'd read in *Sports Afield* in the mid '30s. The title had to do with "the Red Gods," a term that cropped up frequently in outdoor writing when I was a boy and always fascinated me. These were the gods who were concerned about outdoor people—the hunters, fishermen, voyageurs and the like who wandered the distant, lonely edges of the world. I didn't know where the term, or a related one, "Red-Letter Days," came from until, in a book I've long forgotten, I happened onto a poem by Kipling entitled "The Red Gods." Maybe even this wasn't the true source—who knows where a poet gets his inspiration?—but it was good enough for me. I thought the idea would make the basis for the new series.

We have many talented outdoor writers in Pennsylvania, so I asked a number of them to each prepare an article about a day which for some reason stands out in his memory, a day when he felt the Red Gods smiled. These days do not necessarily have anything to do with large game bags; in fact, not all of them are concerned with hunting and at least one takes place at night! Be that as it may, the series starts in this issue with Jim Bashline's story and we'll have one each month for awhile.

Assuming many readers would be unfamiliar with "The Red Gods," both the term and the poem, I wanted to give this background to start things off. I also wanted to print the poem. Surprisingly, it was impossible to find. No collection of Kipling's works included such a title. I was beginning to think I'd dreamed the whole thing when one librarian, far smarter than I, asked if I knew the first line. That was easy. No one could forget something as magical as *Now the Four-way Lodge is opened, now the Hunting Winds are loose— Now the Smokes of Spring go up to clear the brain* . . . She immediately recognized this as the opening of Kipling's poem, "The Feet of the Young Men," written in 1897. A shortened version appears on the following page. Maybe it will affect you as much as it has me. I've taken the liberty of running it by the title I first knew, "The Red Gods."

—Bob Bell

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The Red Gods

Now the Four-way Lodge is opened, now the Hunting Winds are loose—
Now the Smokes of Spring go up to clear the brain;
Now the Young Men's hearts are troubled for the whisper of the Trues,
Now the Red Gods make their medicine again!
Who hath seen the beaver busied? Who hath watched the black-tail mating?
Who hath lain alone to hear the wild-goose cry?
Who hath worked the chosen water where the ouananiche is waiting,
Or the sea-trout's jumping-crazy for the fly?

Who hath smelt wood-smoke at twilight? Who hath heard the birch-log burning?
Who is quick to read the noises of the night?
Let him follow with the others, for the Young Men's feet are turning
To the camps of proved desire and known delight!

Do you know the blackened timber—do you know that racing stream
With the raw, right-angled log-jam at the end;
And the bar of sun-warmed shingle where a man may bask and dream
To the click of shod canoe-poles round the bend?
It is there that we are going with our rods and reels and traces
To a silent, smoky Indian that we know—
To a couch of new-pulled hemlock, with the starlight on our faces,
For the Red Gods call us out and we must go!

Do you know the world's white roof-tree—do you know that windy rift
Where the baffling mountain-eddies chop and change?
Do you know the long day's patience, belly-down on frozen drift,
While the head of heads is feeding out of range?
It is there that I am going, where the boulders and the snow lie,
With a trusty, nimble tracker that I know.
I have sworn an oath, to keep it on the Horns of Ovis Poli,
And the Red Gods call me out and I must go!

I must go—go—go away from here!
On the other side the world I'm overdue.
'Send your road is clear before you when the old Spring-fret comes o'er you,
And the Red Gods call for you!

—Rudyard Kipling, 1897



Sam Is My Dog

By Jim Bashline

A WHOLE PILE of hunting and fishing tales begin with, "I'll never forget the day that . . . . ." The number of stories that begin this way increase with the teller's years in the field. With over thirty years of outdoor snooping behind me, I am amazed at the number of stories I am telling nowadays that begin that way. These are stories of the days the Red Gods smiled. Frequently they have nothing to do with full bags or heroic happenings. They are, instead, the days that shine in memory because something special occurred that touched the inner senses. It may have been humorous, sad, terrifying, electrifying or heart warming. Whatever the reason, we've all had them and dearly enjoy recalling them at the drop of a hat or a well worn hunting boot. So it is with me and the day that my dog Sam discovered a way to outfox ringnecks.

I knew very little about retrievers when I was growing up in Coudersport. If anyone owned a hunting dog it was either a pointing breed, hopefully geared to grouse and woodcock, or it was a beagle (or a rough facsimile) that made noises on a rabbit trail. A stylish handler of ruffed grouse is a rare animal. Oh, sure, lots of them will point a bird at odd intervals, but one that knows just *how close* to get before locking up is a one-in-a-lifetime dog. I haven't seen many of them. Beagles will either run rabbits or they won't. But I love 'em all, and even the dog that just sort of tags along is better than no dog at all. A dog adds that extra di-

mension to hunting that nearly defies description. Dogs of some sort have been assisting man in capturing game for thousands of years and the guy that first referred to them as "man's best friend" knew what he was talking about.

My dog, Samantha, came into my life six years ago and my autumn career as a hunter has been decidedly richer for it. She didn't amount to much on that first meeting. She was nothing more than a lump of black hair with four feet, a nose and a wiggling protrusion on the other end. Sam was a Labrador and it was immediately obvious from the reaction of the rest of the family that she would be our dog for better or worse.



THOUGH SAM SEEMS to prefer hunting pheasants to any other gamebirds, she also enjoys retrieving doves, and here eagerly watches some mourners that are passing just out of range.

Sam didn't begin life as just an or dinary dog. She is a granddaughter o the best hunting Lab I ever shot over Bob Parlaman's Pat, known all acros western Pennsylvania as a top gun dog Her father's name was Prince, a burly barrel-chested monster that Bingo Shelby molded into a top waterfow specialist. Before his untimely death a couple years ago, Bingo was th caretaker at the Game Commission' Pymatuning museum. Prince was sor of Game Commission property and wa used extensively for many years as th clean-up dog on the goose managemen area. There was no question about it Sam had the background to become a outstanding gun dog. The question was did I have the sense, time and know how to do anything with that back ground?

Good friend Gene Hill recommended that I buy Dick Wolter's books—al three of them, *Water Dog*, *Gun Dog* and *Family Dog*—since I wanted to use Sam on waterfowl and upland game a well as keep her in the house. I did buy all three books and I never regretted th purchase. Dick's training methods ar easy to follow . . . and they work.

The first season that Sam spent in th field was full of mistakes and shortcom ings, not all her fault. The retriever tha works full time on ducks out of a blind is taught to watch the sky and mark al birds when they drop. The dog is t fetch only when the command is given On upland game the hunter expects a flushing dog to work figure eights i front of him to rout out pheasant grouse, quail, woodcock or whatever They are different games and Sam wa having a tough time figuring out wha we were hunting.

She learned in time and today does reasonably good job (it's a struggle t be modest) on most species. She suit me fine and I am convinced that I brin home 100 percent more game becaus of her. Not only do I find more gam but practically no cripples escape. Mos

dogs can be trained to retrieve, but Labs do it from birth, or almost. It's the rare Lab pup that, at six weeks, won't run after a ball or a bundle of rags that is tossed out in front of it. Combine the toss with the command "fetch" and half of the training for a retriever can be done before the dog ever sees a live bird.

But this episode is not about dog training. Dog trainer I am not. I'll leave that department to Nick Sisley and the other pros. I'm just a guy who hunts, likes dogs and happened to luck out with one that adapted to my amateurish attempts to train her. In a way, I didn't train her, she trained me. Prior to Sam's appearance in my life, hunting ring-necked pheasants was largely a hit and miss affair . . . . mostly the latter. For some reason, pheasants don't like me and I suspect they don't like anybody. Can't blame them much, since the hunter's goal is to reduce a pheasant to an edible two-pound package of meat.

Unlike the grouse that I grew up with, the ringneck has a nasty habit of running instead of flying. These birds are the undoing of many fine pointing dogs and for that reason most hot-shot dog trainers agree that flushing dogs are better on the "Chinaman" than are the pointing breeds. Just about the time a pointer locks up on a hot pheasant scent, said bird will sneak out, close to the ground, in another direction. The dog doesn't know whether to break point and "hunch up" a bit or call a



LABS DON'T POINT but are fine flushing dogs, and occasionally one learns, as Sam did, to circle in front of a running pheasant and cut off its escape. Once in awhile it flushes toward the hunter.

streetcar. The flushing dog, be it a springer or Lab, by instinct wants to put that bird into the air. Maybe it's not instinct but the dog soon learns, all by itself, that if something is going to be retrieved, the bird must first fly for the master to bring it down. You can help in the training but a good dog will do this all by itself. The difference between failure and success is how fast the dog can force the bird airborne.

For the first couple seasons, Sam loved this business of putting birds into the air. The only trouble was, maybe 90 percent of the birds got up so far away that a shot was usually nothing more than a congratulatory salute. Still, Sam and I collected some birds—a lot more than I would have found myself. Pheasants are tough birds to kill stone dead and the disabled birds that formerly got away were now winding up in my game pocket.

But, with your indulgence, "I'll never forget" . . . . . that special autumn day in York County when an event occurred that made me a Lab lover forever. I finally knew what Dave Duffey, Gene Hill and Dick Wolters

When The Red Gods Smiled

meant when they said that Labs not only can take commands like a robot (which they have to do at the field trials) but can also *think* for themselves.

Frost was clinging to every twig and cornstalk on that morning, and walking through any sort of cover was a noisy affair. Every footstep cracked and snapped. This was Sam's third year of pheasant chasing and she was bouncing along beautifully in front of me, cutting nice figure eights. She knew from experience that this was the best way to get the birds up and I was very happy just watching her do her thing. But she was making a whale of a racket too and, although we were finding birds, they were flushing too far out in front . . . . even the hens were jumpy.

Snuffing Sounds

We were moving along the edge of some standing corn. A strip of fox tail, briars and assorted ging weeds beside the corn looked like likely cover, and from the ground "snuffing" sounds that Sam was making, there was obviously a lot of scent. Suddenly, out ahead, a cockbird raced from the thick stuff into the first opening between the corn rows and began to hightail it right out of the county. Sam saw the bird too and took off running hard. No chance, I thought, she'd put that bird into the air at least eighty yards ahead of me.

Abruptly, Sam leaped to the right and into the heaviest part of the cover. I couldn't believe it! Either she had lost sight of the bird or another one was hiding in the cover and caught her attention. She disappeared into the thick cover and for a few seconds the only way I could follow her progress was from the cracking and snapping of twigs and assorted rubble. Poor old Sam, I thought, she'd flipped her lid. I'm an emotional sort of person and it's been said many times that a dog takes on the the personality of its owner. Perhaps she's had enough of these silly pheasants and just decided to forget the whole thing.

I was just about to raise the whistle to my lips and attempt to call her back, when to my total amazement, there was that cockbird legging it hard as he could, *right straight at me!* Fifteen yards behind him came Sam, boring on with determination. The rooster spotted me standing motionless when he was about ten feet away and took off in a flurry of wingbeats and cackles. It was the classic pheasant rise. He towered up to my left and hung in the air momentarily. My gun boomed, feathers blossomed, and the bird hit the ground. Without a second's hesitation, Sam pinned one wing to the bird's back and proudly fetched it. The look in her eye as she released the bird into my hand said, "Now what do you think of that. wise guy, pretty good, huh?" Sam and I



were good buddies anyway, but at that moment I honestly believed she just had to be the greatest Lab in Pennsylvania, maybe the whole world! I knew then that I had a pheasant dog.

What Sam had figured out totally on her own, was that ringnecks can't count very well. There were two of us, dog and hunter, but we were traveling pretty close together. Sam reasoned (what other explanation is there?) that if she cut out on a wide arc away from the bird, outdistanced it, and attempted to drive the bird back toward me, there was a much better possibility of having something to pick up. To prove that it was no fluke, she did the same thing an hour later and has since done it a couple of dozen times. The trick works best when she sees the bird first, but she has done it on enough occasions by scent alone that I am now convinced it is pure reasoning power. I'm sure some professional dog trainers will disagree, but let them. Sam is my dog and thank goodness for it. They'll just have to figure it out for themselves.

Now this story may not be unique among Lab owners, for I've heard others recount similar tales (Lab owners are amazingly vocal about their dog's accomplishments), but when such a happening unfolds with *you* and *your dog*, it takes on special meaning. Sam got an extra measure of hugging that night and a double spoonful of gravy on her dog chow. I think she knew why too.

I'd like to think I had something to do with Sam's ability to circle out in front of running birds, but in all honesty I'm sure I had little to do with it. The hunt part was bred into her and desire is something no owner can instill. The only ingredient I added was affection. If a hunter really cares for a dog, the animal knows it and strange things begin to happen. A lot of fine hunting dogs have been trained mechanically by handlers who know their business, and I'm not knocking them—if field trials are your thing and your dog has the ability, a professional trainer will pay dividends. But for a hunting companion, the dog that lives with you soon knows and understands what you want and will do its level best to provide it. Even Nick Sisley, who has trained a truckload of dogs for himself and others, wrote in GAME NEWS a couple years back that talking things over with a dog really helps. He couldn't explain it but he knew that it worked. I don't know if I can explain it either, but there is a bond that develops between man and dog that is more mysterious than man's relationship to another human being. While they cannot speak your language, they seem to sense what it is that you are trying to do. Put on your hunting boots in July and it doesn't mean a thing to them. Put on the same boots in October and November and the inner light in a dog's eye is instantly turned on.



SAM RETURNS a ringneck to Sylvia Bashline—a November chore she looks forward to for eleven months of the year. A house dog as well as a hunter, Sam brings pleasure to the Bashlines all year.

By field trial standards, Sam will never make the grade. She's still an exuberant pup at heart and I can overlook some of the technical errors in her performance. But she's my dog and you are not permitted to criticize her if you hunt with me. Right, Sam?



ACTIVITIES OF THE Division of Land Management, such as this construction work on Game Lands, account for over 40 percent of the PGC's expenditures.

P.G.C. Annual Report

July 1, 1973 — June 30, 1974

EXECUTIVE OFFICE

Pennsylvania's acknowledged leadership in recreational hunting, in an era of rapidly increasing demands on our land and wildlife resources, bears testimony to the Game Commission's aggressive, imaginative and farsighted management programs. In the final analysis, good hunting is the result of day-to-day hard work and effort by Commission employees who have chosen to dedicate their professional talents and careers to this public service.

The Executive Office consists of the Executive Director and his two Deputies, who are directly responsible to an eight-member body known as the Pennsylvania Game Commission. Commission members, two of whom are appointed by the Governor each of the odd-numbered years, serve eight-year terms without compensation. Collectively they formulate policies and programs designed to manage Pennsylvania's wildlife resources in the best interest of all concerned. The Director and his immediate staff, in turn, serve as a catalyst and provide a common bond and direction of purpose for the field and administrative divisions.

COMPTROLLER'S OFFICE

This office assures the proper and legal receipt and disbursement of funds, prepares and distributes payrolls for employes, provides financial guidance to the Commission, and makes available and coordinates information necessary for management and budget purposes. To carry out these objectives, the

Comptroller's Office is divided into five sections: Systems and Procedures, Accounting Control, Pre-Audit, Payroll,and Revenue and Receipts.

Accounting records of the Game Commission are subject to annual audit by the Auditor General. The Comptroller's Office is responsible to the Office of Administration and adheres to the directives and procedures established by them.

DIVISION OF ADMINISTRATION

This Division is comprised of data processing, personnel, procurement and hunting license sections. Although the Game Commission Training School is located near Brockway in Jefferson County—and appeared to be isolated in last year's report—it is part of the Division of Administration.

Personnel Section

The Personnel Office is responsible for all PGC employes in the state in the areas of classification and pay, employe benefits, career development, affirmative action, and others. Current operations involve approximately 315 civil service employes, 405 non-civil service employes, and approximately 150 seasonal employes. Employe benefits are quite comprehensive, equaling 21% of payroll expenditures, and include things such as social security, hospitalization, and disability leave with pay. Since passage of Act 195, labor relations has assumed a more prominent status. Participation of the personnel section extends not only to management training but also to negotiations, handling of grievances and arbitration.

Counseling is provided to all employes on the State Employes Retirement System, Federal Social Security, Internal Revenue Service mandates for retired personnel, etc. The Personnel Office also provides information on the Game Conservation Officer Trainee recruitment and provides training for Division Chiefs, Division Supervisors, Game Farm Superintendents and other management staff.

Procurement Section

The Procurement Section purchases materials, supplies, equipment and printing for district offices, game farms, and other installations, as well as for the Harrisburg Office. The rising cost and scarcity of many commodities and services represent some of the Commission's gravest concerns. For example, Commonwealth gasoline prices rose from 12 cents per gallon in 1972 to 50 cents per gallon in 1974.

Hunting License Section

This unit appoints and supervises approximately 1600 issuing agents. The unit also supervises the issuance of various types of hunting licenses by county treasurers. Monthly reports are received and audited, and revenue is deposited in the Game Fund by way of the State Treasurer. The Hunting License Section makes sure agents remit funds due on a monthly basis and that licenses allotted do not exceed the amount of a bond security.

Data Processing Section

Practically every segment of Game Commission work is condensed through data computerization. The Data Processing Section works with the budget, payrolls, state and federal accounting requirements, land records, and game management. Big game harvest report cards are now sorted by computer, eliminating the need for temporary employes to do this work. Data from the harvest report cards are vital to future deer management recommendations.

Training School

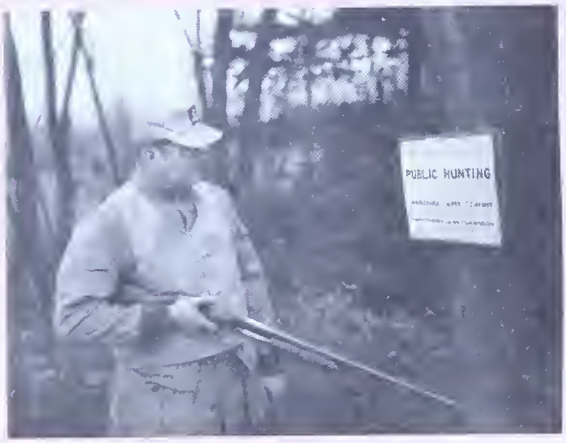
Plans are underway to recruit the 16th Class of Game Conservation Officer Trainees to begin training in July, 1975. The Training School has been used by the PGC since 1936 to educate new employes in all phases of conservation and game management prior to assignment to vacant field positions. Classroom instruction is augmented by on-the-job training with selected PGC field officers.

Field Administration

Some administrative tasks are delegated to the six field division offices;

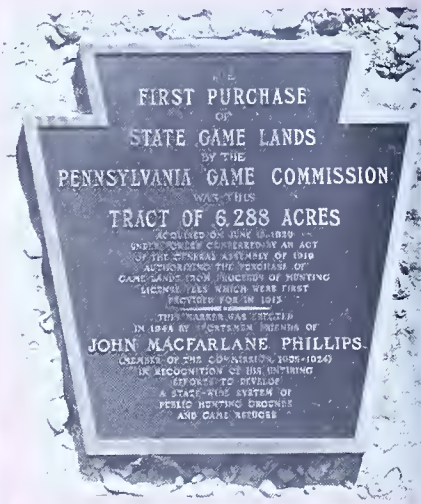






THE HOWARD NURSERY and the Mid
Creek Waterfowl Area are examples of La
Management work that benefits sportsmer
large staff is needed to process the oft
work of this division. Keystone, below, co
memorates the purchase of the acreage
Elk County which became SGL 25, the PG
first State Game Land.





however, primary administrative policy lies with Harrisburg. This insures uniform implementation of all Game Commission and Commonwealth directives and policies.

GAME MANAGEMENT

The Division of Game Management was created in 1973 from the former Divisions of Research and Propagation. This division reports annually on research studies of Pennsylvania wildlife species. The propagation of game birds for restocking is also the responsibility of this division. In addition to game bird propagation at the game farms, the division handles the purchase of game, trapping of wild game, and transfer and release programs.

Propagation Section

Six farms propagate pheasants, wild turkeys and ducks. During the past fiscal year, the Commission released 210,270 pheasants, including 25,500 purchased from private breeders, 3583 turkeys, and 13,665 ducks. In the statewide Pheasant Chick Program, 73,635 chicks were distributed to cooperators. These chicks are raised to 12 weeks of age and then released under PGC supervision. Mallards raised on the State Wild Waterfowl Farm near Meadville were released in the spring of 1974. In addition, 2872 rabbits were released. All rabbits which were trapped and transferred were trapped without charge by sportsmen's organizations and others not interested in compensation. (The Commission no longer pays for the trapping, but still furnishes the traps.) The cost of feed for pheasants, turkeys, and mallard ducks continues to soar. The average cost for feed during the 1972-73 year was $111.50 per ton; it rose to $176.73 per ton for the 1973-74 year, an increase of over 58 percent.

Research Section

Deer Study—Almost completed is a study involving male fawn deer from very poor range given a nutritionally adequate diet. Of the 10 male fawns maintained on high quality rations, nine produced three or more antler points at one and one-half years of age.

Turkey Study—Radio telemetry work with wild turkeys was started in mixed oak habitat this spring. (A similar study of northern hardwood habitat started approximately two years ago.) Of primary initial concern was brood habitat. By instrumenting hens prior to incubation, biologists were able to evaluate nest sites, brood habitat, brood movements, brood survival and daily activity patterns. The study involving the creation of forest openings to favor wild turkey brood production has gone well. Various grasses and legumes have been successfully established.

The 1974 spring gobbler season was another success, with an estimated 2516 turkeys harvested. In 1975, a three-week spring season will be held. This will not harm the population and will offer more assurance that the gobbling peak will be encompassed.

Pheasant Study—The pheasant study ended as a full-time research project. In the future, periodic censuses will compare the populations on previous study areas and select areas to release wid-trapped pheasants.

Rabbit Study—Forsythia was planted at sites on three State Game Lands to initiate the study of minimum cover requirements necessary to increase a rabbit population. It will take three to five growing seasons to measure the effect of the cover on the populations. Daily and seasonal behavior and activity patterns are still being determined via radio-tracking of instrumented rabbits.

Cooperative Research Studies

The Cooperative Wildlife Research Unit at Penn State and other organizations at the University conducted many studies for the Commission this past year. These studies included analysis of deer mortality and behavior along Pennsylvania highways, research projects in wildlife administration and management problems, a study of black bear populations, and a study of elk populations in Elk and Cameron counties.

The Northeast Wildlife Disease Research Center at the University of Con-

necticut conducted studies for the Commission on wildlife diseases. The Commission participated in the Cooperative Waterfowl Banding Program with the Wildlife Management Institute.

New Studies—On July 1, 1974, the Game Commission launched a study on the mourning dove and the ruffed grouse. Progress of these studies will be reported later.

Small Game Questionnaire

The small game harvest survey for 1974-75 will have a new innovation in that nonrespondents will receive a follow-up questionnaire. This should improve the accuracy of the harvest figure.

DIVISION OF LAND MANAGEMENT

Purchasing, developing, managing and maintaining the 1,153,629 acres of Game Lands are the primary responsibilities of the Division of Land Management. In cooperation with federal agencies, the Department of Environmental Resources, private companies and individual landowners, an additional six million acres are available and administered for public hunting and recreation. A total of 370 people, including land managers, work crews, foresters, waterfowl management agents, surveyors and administrators, are directly involved in the Land Management program.

ROYALTIES FROM gas and oil wells on State Game Lands provided a significant amount of revenue to the Game Commission during the past fiscal year.



Land Acquisition

During the fiscal year 1973-74, an additional 9081 acres of State Game Lands were purchased in 21 counties with Game Fund monies. These lands cost $981,538. Lands bought with Game Fund monies since the acquisition program began in 1920 now stand at 1,136,101 acres, this at a total cost of $12,875,442. In addition, 17,527 acres were purchased with Project 70 funds during the years 1965 to 1973. At present, indentures, interior holdings and public accesses are being purchased wherever possible to create more efficient management units.

Payments In-Lieu-of Taxes

Contrary to often-expressed public opinion, land owned by the Commission is not free from all obligations. Payments are made to local government bodies in-lieu-of taxes at a rate of 20¢ per acre. During the past year $91,016.82 was paid to the various counties, $91,483.83 to school districts and $45,650.67 to township road supervisors, for a total of $228,151.32.

Management and Development—Game Lands and Leased Public Lands

New land cleared for food strip development totaled 308 acres, 3678 acres were planted to grains and legumes, and 21,529 acres of food strips were maintained by mowing and other treatments. There were 354 acres of corn and 727 acres of small grain left standing for wildlife. Sharecropping activity on the Game Lands increased to 7258 acres of corn and small grain planted. A total of 845 acres of woodland borders were cut. In addition, 6840 fruit and nut trees were released, 4193 trees were pruned, and 21,480 shrubs and vines were released to provide more wildlife food.

Land Management constructed 66 parking lots, 46 miles of hunter access trails, 5 bridges, 14 ponds, 357 nesting structures, and 37 miles of Game Land access roads. The division also maintained 1767 miles of road, 230 miles of hunter access trails, 856 parking lots, 24 bridges, 122 ponds, 1559 nesting structures, and 1281 miles of Game Land boundary.

Howard Nursery

The Howard Nursery increased its production to 5,056,500 conifer, shrub and other tree seedlings. These were distributed for planting on State Game Lands, Farm Game Projects and other lands open to public hunting to improve wildlife habitat.

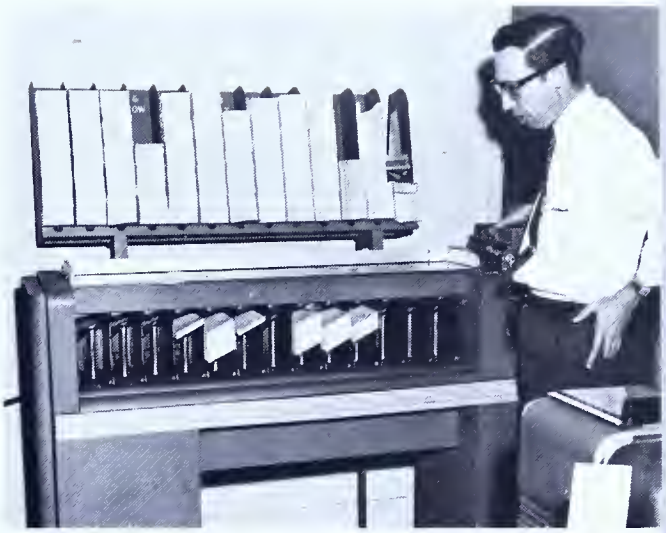
Forestry Section

Game Commission Foresters and Forest Technicians collected field data on and prepared plans for 41 Game Land tracts involving 189,055 acres. They also planned and administered commercial timber sales on 5110 acres. These timber operations improved wildlife habitat by opening the forest canopy, permitting sunlight to enter and thus enabling sprout growth and regeneration to increase and provide more wildlife food and cover. Sale of wood products brought in $616,500, an increase of more than $248,000 over the prior year.

Federal Aid

During the fiscal year, the PGC received $2,823,717.54 in federal aid from different sources. Pittman-Robertson funds, derived from the federal excise tax on sporting arms and ammunition, totaled $2,442,371 and were spent for wildlife habitat improvement, farm game development, hunter education and wildlife research.

The Bureau of Outdoor Recreation funded $204,807 on a 50-50 cost-share basis for the purchase of 3962 acres of State Game Lands in Beaver, Indiana and Potter Counties. The U.S. Department of Housing and Urban Development contributed $111,013 as a final cost-sharing payment for acquisition of the Blue Marsh Project on Game Lands 280, Berks County.



HENRY McCAULEY, who has charge of the PGC's data processing equipment, separates computer cards to supply information to biologists working on a wildlife research program.

Hurricane Agnes in 1972 caused extensive damage to roads and bridges on State Game Lands. Under a cooperative agreement with the U.S. Forest Service, emergency treatment measures to prevent accelerated erosion and sediment damage to downstream areas were applied to areas on eleven State Game Lands. A partial reimbursement in the amount of $40,424.57 has been received to date.

Habitat Improvement Program—Private Land

Habitat improvements on private lands open to public hunting were the same as the year before, with 296 landowners cooperating in the program with a total acreage of 73,865.

Farm Game Program

Five hundred and sixty-one farms, totaling 74,349 acres, were leased through the Cooperative Farm Game Program during the fiscal year. There are currently 171 projects in Pennsylvania with 1,913,500 acres of land open to public hunting through the cooperation of the landowners. Game Commission personnel planted 80,050 tree and shrub seedlings on these cooperative project lands, and 1,118,021

coniferous and 439,580 shrub seedlings were provided to landowners for planting.

Forest Game Program

The Forest Game Program, which was initiated to give added protection to large forest owners and to encourage them to continue to allow public hunting, increased to 10 cooperators with 465,178 acres.

Safety Zone Program

The Safety Zone Program continues to be an important contribution to public hunting in Pennsylvania. Private landowners have provided more than 2¼ million acres of free public access. The number of tracts and total acreage has declined during the past several years, but we hope renewed effort will reverse this trend.

Project 500

Project 500 funding for development of Commission-owned land amounted to $1,800,000 this fiscal year. The projects included development and improvements to public access, strip-mine restoration and wildlife habitat improvement.

WILDLIFE BIOLOGISTS determine buck's age by examining teeth. Hunters who bring deer to check station are a big help to deer management program.



Contracts totaling $357,000 were awarded for four major construction projects during the past fiscal year. These included a storage and headquarters building, alterations and additions to the Pymatuning Hunter Registration Building, two brooder houses at the Eastern Game Farm and repairs to a dam on State Game Lands 56, Bucks County. Plans for the development of the Glades project on State Game Lands 95, Butler County, include road improvements, parking areas, boat access and a storage and headquarters building.

Waterfowl Management

The H. L. Buchanan (Custards) Dam at Game Lands 213, Crawford County, was completed. This structure will make it possible to flood approximately 1000 acres of marsh habitat and make it available to waterfowl during the hunting season. Two other structures were completed at Game Lands 214 on the Crooked Creek Watershed, a portion of the Pymatuning complex, and will be managed for flood control purposes and hunting recreation. Both the H. L. Buchanan Dam and the two Crooked Creek Dams will be open to public hunting and will help to alleviate the overcrowded condition in the Pymatuning Area.

With cost-sharing and engineering assistance from the Soil Conservation Service, we participated with the Endless Mountains Resource Conservation and Development Project in Bradford County, constructing two impoundments on State Game Lands 250. These structures, completed during the fiscal year, will flood approximately 100 acres of abandoned beaver dams and, hopefully, attract waterfowl.

Corps of Engineers Cooperation

Agreements with the U.S. Army Corps of Engineers, covering 14,719 acres at eight water impoundment projects, enabled the Game Commission to carry out wildlife habitat improvement, along with providing additional areas open to public hunting.



SUCCESSFUL HUNTERS LEAVING BLINDS at Pymatuning are testimony to the effectiveness of waterfowl management program in northwestern Pennsylvania.

Right-Of-Way Administration and Licensing

Section 906 of the Pennsylvania Game Law authorizes the Commission to grant rights-of-way to private business, industry and municipal and other governmental agencies in recognition of public needs for power and pipeline facilities, communication towers, etc. Each right-of-away application is evaluted to identify any adverse impacts on wildlife habitat or ongoing land management programs before they are approved. Electric transmission and gas and oil pipelines represent the majority of present right-of-way licenses affecting Game Lands. The licensed companies must maintain their rights-of-way in an approved food and cover condition, and many are reseeded on a regular basis.

For the past few years, new applications have been averaging between 40 and 60 per year, with just over 1000 licensed rights-of-way currently on file. Current receipts from all right-of-way licenses are approximately $200,000 per year.

Highway Impact Review

One hundred and twenty-five projects were reviewed this year to determine any adverse impact to wildlife of highway construction or reconstruction programs. Of the 125 project proposals, 20 will have a direct or potential effect on State Game Lands.

Minerals Section

Revenue derived from the lease and sale of minerals, oil and gas amounted to $201,076 during the past fiscal year. Increasing interest in gas and oil exploration, brought about by the current energy shortage, is expected to increase annual revenues in the future.

DIVISION OF LAW ENFORCEMENT

The unending problem posed by willful violators of the Game Law increased this past year for many reasons. The apparent inclination by a certain segment of the public to disregard all laws is certainly a factor. This demanded an increase in law enforcement efforts, with Game Protectors and deputies apprehending and prosecuting 9657 persons for violations of the Game Law, with 9517 convictions. Penalties amounted to $341,792, an increase over the previous year of 4.6

percent in prosections and 9.5 percent in penalties collected.

The revocation of hunting privileges is an excellent tool for curbing willful Game Law violations. During the 1973-1974 fiscal year, 1432 licenses were revoked, including 23 as a result of referee hearings conducted to determine the cause of hunting accidents and 14 as a result of court orders. During this same period, hunting privileges were restored to 21 persons.

The purchase of new equipment and routine replacement of standard uniform items cost $32,536. Costs of uniform items are increasing at a rapid pace and will make up a bigger percentage of our budget if inflation continues.

Deputy Law Enforcement & Training

Our deputy force consists of 1530 regular and 69 honorary deputies. Training was continued this past year, in spite of the fact that funds for this purpose were limited. Each new deputy must attend an orientation meeting at the Division level, where the Game Commission and its policies are described in detail. Deputy training varies according to need, and at least four formal training sessions are available to each local deputy every year. Subjects covered include legal procedure, self-defense, first aid, public relations and other items. Some districts hold weekly training sessions. Expenditures for our deputy force, including training, totaled $328,730.

Radio System

The Game Commission radio system was not changed during the past year. The Commission now owns 252 mobile units, 84 portables, 83 pieces of base and control locations, and 36 tower and control locations. The cost of operation this past year was $115,862 including $53,696 for contracted maintenance of base and mobile equipment. Deputies maintain and use 35 land mobile stations and 700 mobile units at their own expense. This system has great value in law enforcement. It is also available for Civil Defense and has proved valuable during emergencies.

Servicing Wildlife Damage Complaints

Servicing wild animal and bird complaints takes considerable time of both Game Protectors and deputies. Much of this is done by the deputy force, and the cost of this activity cannot be estimated. Last year, we disposed of 25,634 roadkilled deer. From these we salvaged 3143 hides, which were sold for $16,029. Elk contribute to our problem of wild animal damage. Although overall cost due to this species is minor, the problem to certain farmers in local areas is significant.

Nuisance geese are a comparatively new problem which continues to grow. These geese are transferred to remote areas where they can forage for food without damaging lawns or cultivated crops. Electronic scare devices have been used with some success on geese.

Sixty-seven bear damage claims totaling $4,898 were paid during the fiscal year. Ninety-one nuisance bear were live trapped and transported to other locations. Construction of three new bear traps and repairing and maintaining the other traps cost an estimated $5000.

We continued to search for effective deer repellents. We furnished tranquilizing equipment to all Game Protectors and made longer-range tranquilizing rifles available to them at Division Headquarters. A total of $8570 was spent on deerproof fencing.

Permits and Applications

The Law Enforcement Division issued 2540 Special Permits which brought $37,145 into the Game Fund. Many permits are issued without charge. We now charge commercial research organizations for protected specimens they collect from the wild. Most collecting permits limit to a bare minimum the number of specimens each scientific collector may take. Forty persons submitted applications to take the taxidermy examination, and 21 passed.

Assistance to Other Agencies

Game Protectors continued to render assistance to other Commonwealth law enforcement and governmental agen-

cies, with salaries and expenses for these activities totaling $39,417. These other agencies in turn helped us enforce the Game Law. We feel this cooperation is worthwhile and rewarding.

DIVISION OF INFORMATION & EDUCATION

Public awareness is essential to an effective wildlife management program. Both wildlife and wildlife habitat are renewable natural resources, and although Mother Nature provides for "her own," effective management can enhance these resources. The Game Commission provides that management, but cannot do so effectively unless the public—hunter and non-hunter—is well informed. The Commission has increased emphasis on programs showing the sportsman's contribution to conservation, and has tried to make the sportsman more aware of what the PGC does for him and his sport.

Pennsylvania Game News

GAME NEWS has had an average monthly circulation of approximately 215,000 over the past year. Almost 300 subscriptions are from foreign countries, 40,000 from out of state. GAME NEWS subscription costs were increased to $3.00 per year or $7.50 for three years, effective July 1, 1974. The increase was made necessary by rising costs; over the past year the cost of paper rose 65 percent and postage 30 percent.

Information

News releases keep the public aware of the Commissions activities. Over 2000 releases dealing with various subjects were circulated this past year; 36 of these were statewide, and included two special and four feature stories. There were 450 radio and TV messages. Commission personnel attended over 7500 meetings this past year, coming into contact with over 3/4 million citizens. Approximately a quarter of these people were at sportsmen's functions; the remainder comprised a cross section of rural, urban, religious, land-



DISTRICT GAME PROTECTORS and their deputies apprehended and prosecuted 9657 persons during the past fiscal year. A total of 9517 convictions resulted.

owner, business and professional persons. Over half were young persons. We will continue to keep the sportsmen informed, but increased efforts will be made to contact "middle-of-the-road people," noncommitted persons who are neither hunters nor anti-hunters. Exhibits have increased contact with these people at schools, fairs, shopping centers, and malls.

Education

Encouraging active participation in outdoor education laboratory training for teachers was a major effort this past year. It's impossible to have personal contact with large numbers of students, but the desired results can be achieved by teachers who have sound wildlife background knowledge and experiences. Commission participation in Conservation Camps and Hunter Education classes maintains personal contact with youth. The FFA Wildlife Habitat Improvement Program also involves many students.

Over 155,000 pieces of free literature on Pennsylvania wildlife were distributed. Most of these went to students. Two new items—Wildlife Fact Sheets and Wildlife Educational Aids—should

reduce costs of answering letters. Approximately 45,000 pieces of paid literature were sent out, and the receipts from these sales were channeled back into the Game Fund.

Educational opportunities at the Middle Creek Wildlife Management Area are unique. The I & E Division has coordinated interpretive services at the Visitor's Center, and the area has accommodated large numbers of non-hunters as well as hunters, providing varied opportunities for outdoor experiences associated with both game and non-game wildlife species.

Wildlife educational films were shown 3939 times. The Commission's wildlife management programs were covered by over 1500 color slide presentations.

Information and Education personnel keep abreast of continuing developments in wildlife and related fields. Personnel attended the short course on photography presented by Nikon Camera, a visual and written communications short course at Cornell University, and a workshop on speech communication given by a consultant.

Hunter Education

During the past year, Pennsylvania's Hunter Safety Program was redesignated as the Hunter Education Program. In addition to safe handling of sporting arms, hunter responsibility will be highlighted in this program to develop better hunter ethics and show the hunter's role in wildlife management.

Four hundred and twenty-one new volunteer instructors were certified. A total of 54,128 students completed the Game Commission's "minimum of four hours" course in hunter education. Hunter Education newsletters were regularly sent to all Hunter Education instructors. The Game Commission has cooperated with Penn State University in a pilot study of developing proper student attitudes in hunter education and wildlife management, and in setting up a correspondence course in hunter education as part of the Extension Services. In cooperation with WPSX Educational Television, the Commission helped develop a five-part educational series to complement training classes.

Photographic Section

This section provides services for all of the Game Commission's photographic needs, but particularly for the information and Education Division. Services include photography, film editing, processing, mounting of color slides, and preparation of visuals. Black and white photos, color prints and slides, and 16mm movie film are used.

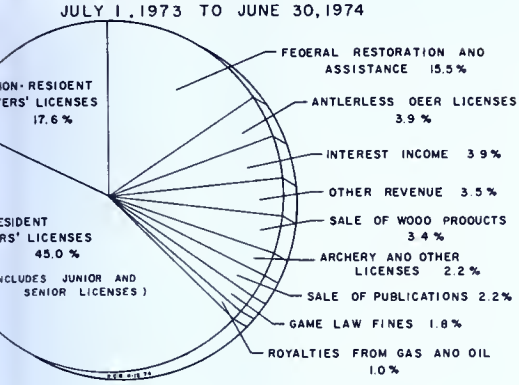
P.G.C. Financial Report, July 1, 1973 - June 30, 1974

by Edward T. Durkin, Comptroller

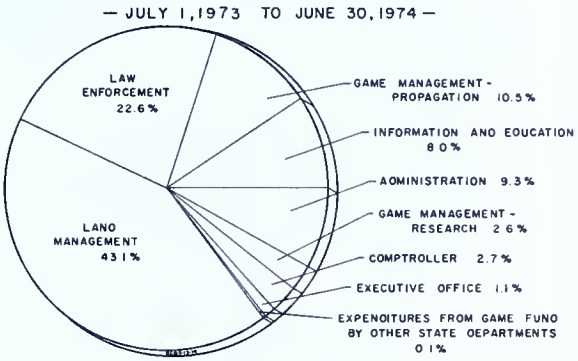
The financial outlook for the Pennsylvania Game Commission brightened considerably in the last fiscal year. Total revenue received amounted to $18,263,045.98 as compared to $13,203,741.75 for the previous year, which represents a 38 percent increase. The additional revenue resulted primarily from the increase in resident and antlerless deer hunting license fees authorized under Act 170, signed July 6, 1972, and Act 36, signed June 27, 1973. Other revenue sources such as federal aid for wildlife, nonresident hunting licenses, interest on securities, and the sale of wood products also showed substantial increases over the previous year.

Total expenditures and commitments increased from $12,949,195.54 to $14,088,649.58, which represents only a 9 percent increase in costs. This small percentage increase results from the Game Commission's cost reduction efforts, despite the fact that purchases of cars, trucks, and other equipment delayed from the previous year, additional land purchases, and salary and employe

GAME COMMISSION REVENUE
$ 18,263,045.98
JULY 1, 1973 TO JUNE 30, 1974



GAME COMMISSION EXPENDITURES AND COMMITMENTS $ 14,088,649.58
— JULY 1, 1973 TO JUNE 30, 1974 —



benefit increases (resulting from collective bargaining agreements), were absorbed during the last fiscal year. The net result was that the balance available for commitment and expenditure increased from $4,880,904.78 to $9,691,424.66—or nearly doubled—during this time period.

These facts indicate that the Game Fund, at the close of the last fiscal year, is in sound financial condition with a good possibility of remaining so for a considerable period of time. This, however, may not be the case if the rate of inflation continues to rise at the present level. Higher costs of materials, supplies and equipment and the increased costs resulting from collective bargaining agreements will increase the 1974-75 budget by more than $1-1/2 million over that for 1973-74. Officials of the Game Commission are determined to hold the line as much as possible and to utilize every practical, cost-saving device to get the most benefit for every sportsman's dollar.

Earmarked Funds

The Game Law provides that certain funds be set aside for specific purposes.

Act 271, Sessions of 1949, provides that $1.25 from each resident hunting license fee shall be spent for improving and maintaining natural wildlife habitat on land available for public hunting. During the last fiscal year the Game Commission spent $2,332,595.54 for this, $1,107,595.54 more than the minimum requirements of the Act.

Act 632, Sessions of 1956, provided that the sum of $1 from the sale of each antlerless deer license should be used for development and maintenance of deer food and cover on State Game Lands. This Act was not affected by the antlerless license increase, which raised the fee to $2.35. One dollar from each license fee was deposited in the Game Fund to be used for general operations and 35¢ was paid to County Treasurers for services rendered. During the last fiscal year, $540,685.44 was expended—$210,000.44 more than the Act's minimum requirements.

The Project 500 Fund is the statewide bond issue passed in 1968 for the purpose of conserving, reclaiming and development land and water resources of the Commonwealth. During the last fiscal year the Game Commission used $1,870,618.85 of these funds.

The results of operations of the Pennsylvania Game Commission for the 1973-74 fiscal year are illustrated in the detailed financial statements below and on the following pages.

PENNSYLVANIA GAME COMMISSION

GAME FUND — AMOUNT AVAILABLE FOR COMMITMENT & EXPENDITURE		1973-74
Amount Available for Commitment and Expenditure, July 1, 1973		$ 4,880,904.78
Plus: Prior Year Adjustment - Cancellation of Prior Commitments		636,123.48
Adjusted Amount Available, July 1, 1973		$ 5,517,028.26
Results of Operations—1973-74 Fiscal Year		
Total Revenue	$18,263,045.98	
Less: Expenditures and Outstanding Commitments	14,088,649.58	
Net Operating Increase		4,174,396.40
Amount Available for Commitment and Expenditure, June 30, 1974		$9,691,424.66

CURRENT AND PRIOR YEAR REVENUE COMPARISON

	1973-74	1972-1973
Resident Hunters' Licenses	$ 7,183,949.72	$ 5,668,517.78
Resident Junior Licenses	787,975.70	619,653.95
Resident Senior Licenses	253,526.65	230,615.40
Non-Resident Hunters' Licenses	3,214,574.60	2,788,862.45
Antlerless Deer Licenses	708,898.60	306,907.10
Archery, Trapping and Other Licenses	394,257.43	334,388.30
Game Law Fines	341,792.55	312,270.00
Federal Aid for Wildlife Restoration and Recreation	2,783,292.97	1,310,751.17
Federal Reimbursement for Flood Related Costs	40,424.57	149,753.00
Interest on Securities and Deposits	717,576.80	350,133.01
Sale of Timber and Other Wood Products	616,500.34	368,178.74
Game News Subscriptions and Sale of Publications	397,891.29	323,563.82
Ground Rentals and Royalties from Gas and Oil	174,795.68	69,116.59
Other Revenue:		
Reimbursement for Comptroller Services	167,404.73	118,473.94
Reimbursement from Prior Year Transactions	67,190.84	5,860.93
Sale of Used Automobiles, Tractors, etc.	52,650.00	18,640.00
Special Game Permits	37,145.25	31,774.75
Sale of Unserviceable Property	24,456.61	11,881.49
Rental of State Property	23,487.00	23,030.00
Sale of Skins and Guns	18,320.15	18,065.15
Miscellaneous*	256,934.50	143,304.18
TOTALS	$18,263,045.98	$13,203,741.75

*Miscellaneous consists of refunds for postage applicable to prior year expenditures, and numerous items pertaining to operations on State Game Lands, such as land and water right-of-way permits, coal mining and hauling, sale of grain, gravel, etc.

COMPARISON OF COMMITMENTS & EXPENDITURES

Current and Prior Fiscal Years

	July 1, 1973 to June 30, 1974	July 1, 1972 to June 30, 1973
Salaries	$ 5,082,922.09	$ 4,894,890.05
Wages	2,614,177.83	2,755,190.18
Employee Benefits	1,272,169.37	1,167,078.96
Land Acquisition	1,156,715.45	938,547.29
Printing and Advertising	616,560.98	499,704.65
Automotive Rental, Repairs and Supplies	525,056.88	489,022.31
Pheasant and Turkey Feed	355,109.96	220,198.89
Purchase of Automobiles, Trucks, and Jeeps	314,258.55	-0-
Maintenance of Buildings and Machinery	307,343.25	331,180.70
Travel Expenses	290,934.43	306,384.38
Payments to Local Municipalities in-lieu-of Taxes	228,875.12	226,621.98
Payments to Other State Agencies:		
Electronic Data Processing	56,121.40	46,416.03
Auditing Services	33,603.07	35,883.29
Reproduction and Mailing Services	27,888.17	13,958.45
Personnel Services	15,935.83	-0-
Purchasing Services	14,484.16	9,239.96
Checkwriting and Disbursement Services	4,501.07	8,663.02
Postage	140,666.77	155,774.48
Purchase of Pheasants and Other Game	137,683.65	160,497.55
Telephone	128,181.99	121,260.22
Office Equipment, Maintenance, Rentals and Supplies	105,301.48	79,713.51
Heating, Power and Light	96,435.11	81,257.36
Legal, Appraisal, and Consulting Fees	74,799.56	54,535.54
Hunting, Photographic, and Other Supplies	72,339.42	31,444.58
Wildlife Research Grants to Universities and Wildlife Assoc.	57,860.00	60,860.00
Purchase of Heavy Equipment and Game Farm Machinery	54,890.25	-0-
Wildlife Habitat Seedings and Plantings	50,495.44	25,107.37
Contracted Maintenance Service on Radio Equipment	45,234.00	48,561.74
Educational Supplies	42,888.25	24,408.24
Insurance on Automobiles and Buildings	42,294.35	46,197.65
Rental of Tabulating and Xerox Equipment	39,520.98	46,499.96
Uniforms for Game Commission Personnel	34,064.01	35,321.57
Building Rentals and Land Right-of-Way Leases	21,411.44	16,325.91
Payments to Individuals for Bear Damages and Deer-Proof Fencing	13,077.32	14,173.55
Game Commission, General Operations—Total	$14,073,801.63	$12,944,919.37
Payments In-Lieu-of Taxes, Dept. of Environmental Resources	14,847.95	3,276.17
Replacement Checks, Treasury Department	-0-	1,000.00
TOTALS	$14,088,649.58	$12,949,195.54

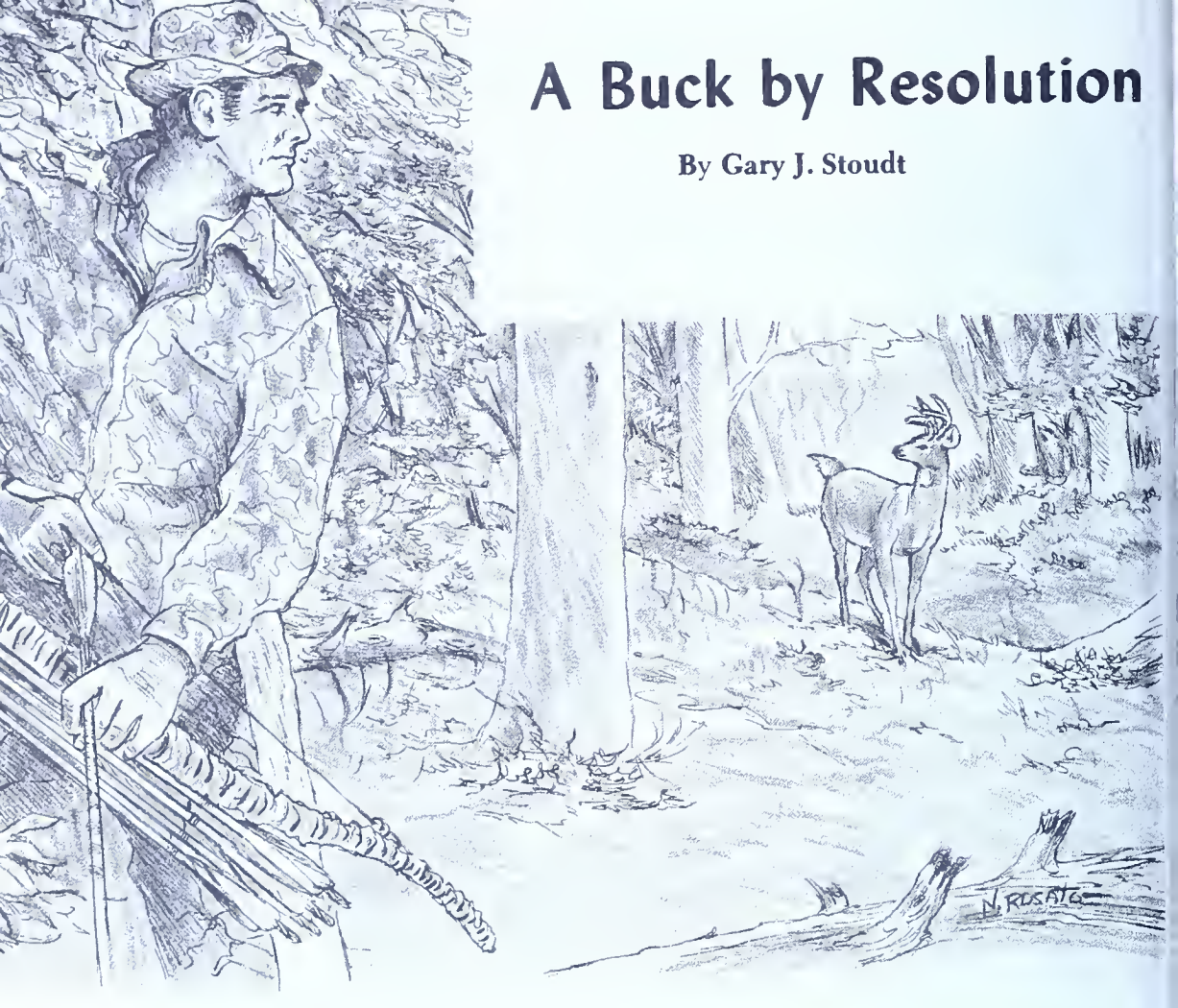
GAME COMMISSION COMMITMENTS & EXPENDITURES
FUNCTIONAL PROGRAM ACTIVITIES
FISCAL YEAR 1973-74

Executive Office		$ 157,286.01
Administration		380,909.57
Personnel Section	$ 155,432.04	
Procurement Section	296,399.81	
Hunting License Section	271,503.18	
Data Processing Section	78,449.06	
Training School	56,923.58	
Field Administration	447,222.45	
		1,305,930.12
Information & Education		
Pa. Game News	503,327.81	
Information & Education Program	454,813.54	
Hunter Education	90,996.93	
Photographic Section	73,425.50	
		1,122,563.78
Game Mgmt - Propagation		
Pheasant Program	1,204,393.28	
Turkey Program	193,384.15	
Mallard Duck Program	75,067.63	
Rabbit Trap & Transfer Program	7,836.20	
		1,480,681.26
Game Mgmt - Research		
Deer Study	95,104.43	
Turkey Study	60,306.00	
Pheasant Study	50,470.44	
Rabbit Study	80,144.43	
Cooperative Research Studies	68,767.79	
Habitat Development Study	5,830.10	
		360,623.19
Law Enforcement		
General Law Enforcement	2,553,362.24	
Deputy Law Enforcement	297,526.81	
Deputy Training	31,204.18	
Radio System	118,862.94	
Servicing Wildlife Complaints	147,768.38	
Asst to other Commonwealth Law Enforcement Agencies	39,417.57	
		3,188,142.12
Land Management		
General Land Management	$ 654,303.52	
Land Acquisition Program	1,180,835.86*	
Payments in-lieu of Taxes	228,875.12	
Game Lands - Mgmt & Dev.	2,378,848.97	
Howard Nursery	158,505.47	
Forestry Section	232,270.24	
Farm Game - Mgmt & Dev.	424,047.57	
Other Land - Mgmt & Dev.	122,635.67	
Federal Aid Section	41,907.00	
Hurricane Agnes Restoration Work	130,500.72	
Waterfowl Mgmt - Special Areas	240,806.04	
Minerals Section	27,132.19	
Survey Section	256,997.21	
		6,077,665.58
Expenditures & Commitments from Game Fund by Dept. of Environmental Resources—Payments in-lieu-of Taxes		14,847.95
TOTAL EXPENDITURES & COMMITMENTS		$14,088,649.58

* Figures given by program activities include labor and overhead costs and therefore will differ from related classification table of expenditures and commitments.

A Buck by Resolution

By Gary J. Stoudt



HE WASN'T a trophy whitetail by any stretch of the imagination, but he was a quite respectable 5-point. The problem was, he had caught me completely off guard. There he stood at full attention, not 30 yards away. There I stood, frozen in disbelief, tightly clenching the bow at my side. I gazed helplessly at the deer, knowing that the slightest movement would put him in gear. Then, in an eye's blink, he swapped ends and bounced out of view over the ridge. Defeated, I sighed heavily, listening to the deer crashing loudly in the distance.

So ended the first day of the bow hunting season, and I trudged slowly back down the mountain to my old Ford. Before leaving the woods, however, I gazed back in the departed buck's direction, vowing to myself that this deer's days were numbered. He wouldn't escape me again.

For the next several weeks I returned religiously to the buck's area, but I simply couldn't locate him. I saw plenty of deer, but my "doomed" buck was not to be found. I began to feel a little foolish about my dogmatic vow.

Then finally the long dry spell ended, and once again I had the buck in sight. With bow ready, I watched as the buck fed cautiously along a well used trail. Slowly, the deer's feeding was bringing him closer to me. The minutes trickled painfully by, the buck coming closer all the time. Fifty yards, then 40, then 35 . . . slowly, surely. I was certain this was at last the moment of truth.

As the wary deer's head was obscured by a thick growth of laurel, I raised my bow and drew back the arrow ever so

slowly. Then, disaster struck! From directly behind me came the loudest snort ever to echo in the wilds. Completely unnerved, I turned to see a doe not 40 yards away, glaring wildly at me. Quickly, I swung back to the buck. "Just one step, fella, just one little step," I coaxed gently under my breath. And then, with all the finesse that is so typical of a Pennsylvania whitetail, the buck took not only one step, but a whole rapid series of them, and all in a perfectly straight line . . . with the dense laurel between us, of course. I didn't even attempt a shot.

In despair, I turned back to the big-mouthed doe, and upon my first movement, she wheeled around and hit high gear in record time. All was quiet in a moment.

Archery season faded into the past and my buck remained very much alive. The gunning season was approaching, so I still had a chance, but then so did about a million other hunters. It seemed certain that this buck was determined to make me eat crow.

Gunning season arrived and I once again hunted for the elusive whitetail. I always knew that Pennsylvania had a great many deer, and I'm sure that at least half of them—all does—passed my stand. But of the "doomed" deer . . . nothing. Hunters killed several bucks in the general area, but I was certain my deer was not among them.

All too soon the final day of deer season dawned. Or rather, I should say arrived. Dawn is not quite the word to describe the opening of such an ugly day. It was one of sleet, winds, drenching rains, and misery. Then warm rain set in shortly after the opening hour, and ice fell thunderously from the trees.

Nevertheless, Saturday found me once again sitting at my favorite stand, a large pine, presently sheathed in drenching, crunching ice. As loads of it crashed to the forest floor all around



SUDDENLY THE BUCK froze to alertness, staring down the slope. Perhaps he had heard another hunter. He cautiously turned around and headed back up the mountain. There was no time for a good shot.

me, I seriously began to question my sanity. Surely, a normal person just wouldn't leave a nice, warm bed for an opportunity to be completely miserable. Then, just as I was about ready to call the hunt to a quick finish, a sudden movement up on the ridge caught my attention. At first I couldn't make out anything, but gradually, from out of the gray and indistinct forms, emerged the vague outline of a feeding deer. Suddenly the chill of the air was forgotten, and my slight trembling was no fault of the weather.

Carefully, I reached for my binoculars, hoping against hope that this deer would be a buck. Imagine my elation when a quick check showed it was indeed sporting a rack—a 5-point rack! The ghost had returned.

The buck was feeding slowly down the slope, walking a step or two, nip-



AT THE SOUND of the shot, the buck swapped ends and came charging back in my direction. I worked another cartridge into the chamber, hoping for another shot.

ping gently at an overhanging limb, and then moving on. He was heading directly for my stand; all I had to do was wait. There would be no mistake this time.

I watched him for nearly 20 minutes before I was satisfied with the shot offered. The deer was well within range, so when he next lowered his head to feed, I slowly raised my rifle. Suddenly the buck froze to alertness, staring down the slope, though not directly at me. Perhaps he had heard another hunter. At any rate, he cautiously turned around and headed back up the mountain. There was no time for a good shot. Hastily, I checked the deer's route of retreat, located an opening, and drew a bead on that area. I knew this would be my last opportunity.

The opening in the brush was small, but it was my only chance. When the buck entered the slight clearing, he stopped broadside, much to my complete surprise. Gently I pulled the trigger and my rifle's report echoed across the mountain.

At the sound of the shot, the buck swapped ends and came charging back down in my direction. I worked another cartridge into the chamber, hoping for another shot, for I felt that my first one must have missed. He hadn't faltered in the least, and I feared I had held too high.

The buck raced by me, then came to an abrupt stop not 30 yards away. I didn't have time to fire before he simply collapsed in his tracks. The deer was at last mine, my resolution was upheld. It had been a long, hard season—one season and one wise buck I'd never forget.

Baltimore's Gun Bounty a Bust

The Baltimore, Md., Police Department recently announced that their gun bounty program—called Operation PASS—will be ended because of a lack of funds. At the same time the announcement was made, Baltimore Police Commissioner Donald D. Pomerleau confirmed that a study showed the number of gun-related murders had risen since Operation PASS began on August 22, 1974. Under the program, police paid $50 for each handgun turned in, and then melted the firearms down after checking for possible involvement in unsolved cases. The department also paid $100 for each tip leading to the confiscation of illegal firearms. Designed to cut crimes committed with illegal firearms, Operation PASS cost the city of Baltimore over $600,000. The Federal Government's Law Enforcement Assistance Administration had earlier turned down a request for a grant to fund the program.

BIG JOE AND THE NO. 1 BADGE





JOSEPH BERRIER, right, was Pennsylvania's first Game Protector. Above is a photo of his badge, No. 1, recently donated to the Game Commission by his daughter-in-law, Mrs. Ruth Berrier.

By Chuck Fergus

PGC Information Writer

ON FEBRUARY 1, 1900, Joseph Berrier was commissioned the first game protector in the state of Pennsylvania.

His commission came at a time when game populations had been decimated by market and illegal hunting, when game laws were violated at will, when law enforcement was often met by armed resistance, and when people were unimpressed with the recently-formed Pennsylvania Game Commission.

The Board of Game Commissioners was faced with an immense task at the turn of the twentieth century. Pledged to enforce game laws throughout a 45,126-square mile state, and thus try to save what little game was left, they needed competent men. When selecting their first game protector, they looked for a man who would be totally impartial in dealing with lawbreakers and at the same time be forceful enough to stand up to them. They looked for a man who would work long hours for low pay. They looked for a man who was woods-wise and could catch violators on their home territories.

Big Joe Berrier had all these qualities, and more. Today, the tales of what he accomplished are almost unbelievable. His pay? One-half the penalties imposed on violators by the courts. In many ways Joe Berrier is a legendary figure, and certainly he is an interesting one.

Berrier hailed from Harrisburg and stood well over six feet tall. He was powerfully built, and many times his physical strength helped him out of desparate situations. Official records





AMONG THE MEMENTOS of Big Joe Berrier's career as a Game Protector are these photos, badges and cards dating from his appointment on February 1, 1900. They include items of his son, John D. Berrier, one of the Commission's first deputies and later a Game Protector with badge No. 6, who is shown in uniform, top right. Photo at left, taken early in this century, is of Big Joe, right, and John, in the field.

show that Berrier met with armed resistance while making four arrests in Luzerne County. He had to use "extreme force," beating two of the men to the ground with his fists and shooting the hat off another's head.

The story is told of a Sullivan County man who made a knife out of a file; he let word get around that he would use the blade to "cut Beeg Joe." Berrier arrested the violator without a gun. On one occasion, he arrested six men in one raid in Mifflin County. He collected them two at a time, handcuffing them face to face around tree trunks, and then chained all his prisoners together and marched them off to jail.

Big Joe received many death threats, but he never minded them and, incredibly, was never hurt in the line of duty. But he did carry an insurance policy in each coat pocket—a 32-cal. Colt automatic. A flip of the coat, and he could fire both guns through the inner lining. That persuaded more than one lawbreaker that it wasn't wise to tangle with this warden.

Berrier often camped in the woods for a week or longer, waiting for game law violators and catching them in the act. As a "traveling game protector," he worked closely with Dr. Joseph Kalbfus, the Game Commission's first Executive Secretary, and tackled tough cases all over the state.

Toward the end of his career, Joe was helped by his son John D., one of the Commission's first deputies. On October 31, 1915, Joseph Berrier died in his river front home in Harrisburg. He was 54 years of age.

After his death, Dr. Kalbfus said, "Joe worked many a day and week for nothing. He paid his own expenses and did splendid work for the State, for which he was never paid. I had the utmost confidence in him, and what he did to stop lawbreaking would fill a book. From the time he was commissioned, he was never off the job."



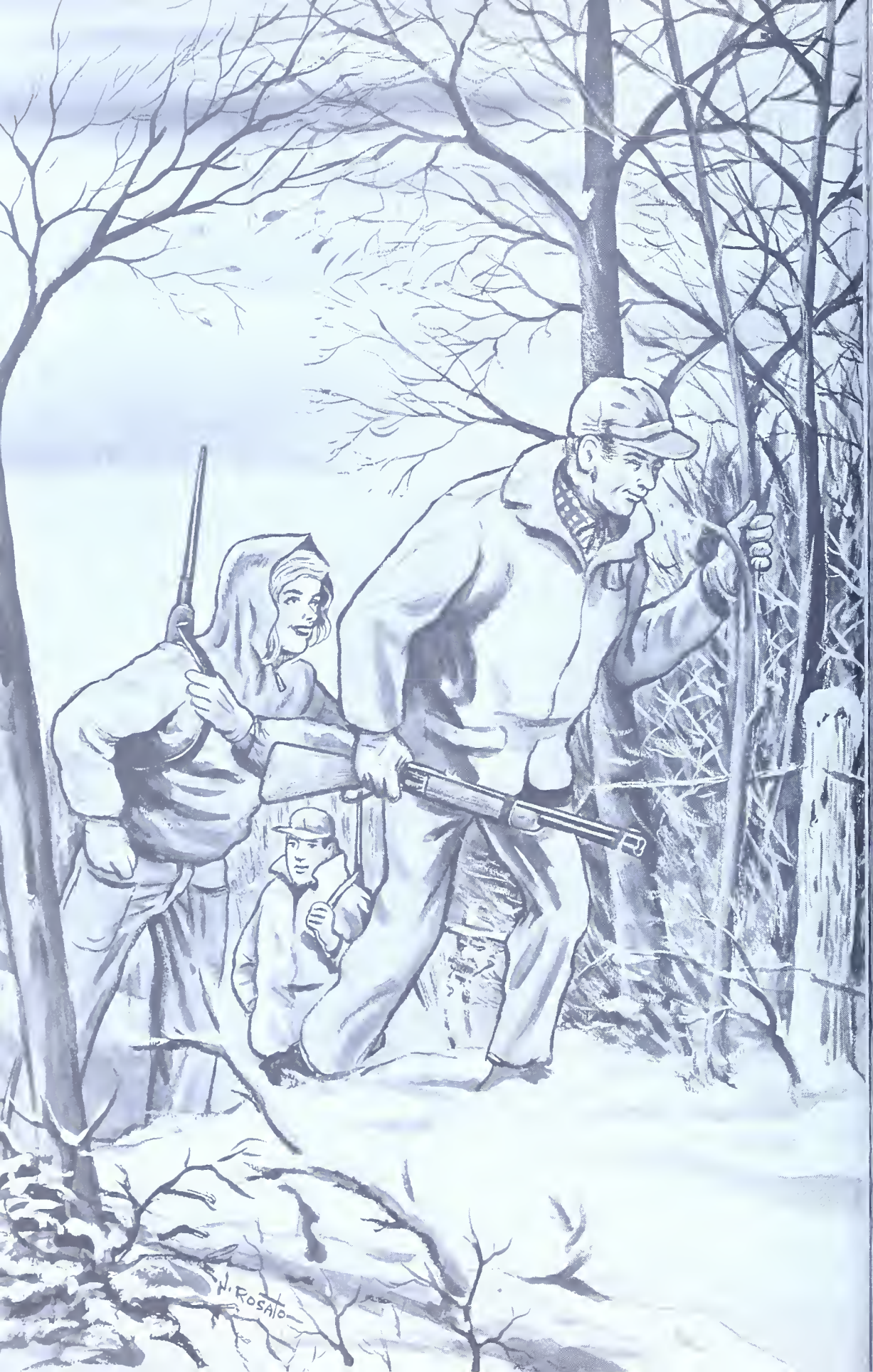
THIS 1930 PHOTO shows John and Jim Berrier, sons of Big Joe, with Bob Latimer, now retired after serving as a Game Protector and Waterfowl Management Agent.

The Berrier name continued to be associated with the Game Commission as Joe's son John worked his way up through the ranks. Commissioned a game protector in 1922 (badge number 6), John was stationed in Potter County. Later, he became supervisor of Division C in the northcentral part of the state. John Berrier gave the Pennsylvania Game Commission nearly 18 years of service before resigning in 1933.

Recently, the wife of the late John D. Berrier gave Badges No. 1 and 6 back to the Game Commission. She also provided the photographs which illustrate this article. As you look at them, be reminded of days when the Game Commission was young. Then as now, brave men worked to ensure an outstanding wildlife heritage for Pennsylvania.

High Birth Rate Helps

Although a young cottontail rabbit has only one chance in twenty of reaching its first birthday, it is one of our most common animals.


N. ROSATO

Season's End

By Cindy Franklin

MY HOME is in Susquehanna County in a little town called Brooklyn. My father owns a farm just outside of it; our farmhouse is on a hill. I go to nursing school now, but I try to get home as much as possible. Home is a quiet place amid the rural beauty that typifies Pennsylvania, and I love the knobby hills and the shallow fertile valleys where I live. In the fall, the foliage of the trees is touched by the frosts and turns the land into a living painting.

After the leaves fall and the weather lingers between Indian summer and cold winter, after small game season winds down to Thanksgiving, the people where I live start cleaning their rifles and begin watching deer movements in earnest.

The story I want to tell does not end with the bagging of an incredible trophy buck. Nor does it end sadly. It has a curiously final ending, or so I thought then, and time has not changed my opinion. I dedicate it to a mongrelish beagle named Henry that my family had a few years ago and whose story I shall write someday.

This incident happened a few years ago. My father led a hunting party that consisted of family, friends, and neighbors. In past years he had almost always managed to get his deer early, but this particular year saw him with no luck. The gang was picking on him quite a bit. As buck season ended, the kidding became worse and my father began to get nervous. He saw no deer on the first day of antlerless season and likewise on the morning of the second.

Tuesday afternoon we drove a section of the Big Woods, a mini-forest between our barn and a pipeline a good two miles away that covers two hilltops and sweeps down over rippling flanks to a small creek named Meshoppen, a long mile below the summit. We saw nothing.

My father decided to go into the south section of the woods where we knew no one had been that day. We hiked out to the trucks and rode to a meadow about three farms down. A good crew of us piled out, and we hiked back into the distant woods. Our gang only hunted a small portion of its long length. This part crossed the broad flank of one hill and rose from a steep and narrow valley to the bold upthrust of another hill, forming a saddle. The uppermost section of this second hill falls rather steeply to a broad slash of cleared ground overlying a pipeline, interrupting the flow of the woods and creating a natural line of posts for standers. The slope is matted with a thicket of evergreens that grow over moss-covered boulders and blackberry briars. The three drivers on top were assigned to come through the mess.

Shirked Duty

It was cold. A chilling wind swept up the slopes and raised a ghostly moan in the hemlocks. The snow on the ground was at least six inches deep, noisy as old leaves in autumn. We shirked our duty by bearing off the hill to our left and following a fence out. The three of us followed the driver who was supposed to come out there. We stood shivering behind an evergreen tree with one of the standers.

It was late in the afternoon. The wind swept up the twisting pipeline,



I WALKED THROUGH THE screen of trees. The rest of the drivers were clustered around my father. He looked at me and grinned. Although I hadn't heard the shot, I knew he had got a deer.

searching out pockets of warmth and freezing them. We huddled in a circle, trying to escape it, and watched the swaying trees without much enthusiasm, rifles clutched in half-frozen hands.

My cousin Bill came crunching up the hill. His frosty breath was blown to tatters by the wind. He glanced briefly at the well-traveled path out of the woods and grinned at us. "Boy, is Don going to be mad when he sees that."

We shrugged and huddled deeper into our faded red hoods. I silently agreed with him. Dad was in no mood for such tricks, but I was cold and didn't feel like arguing. It was getting late and there was at least a good half-mile climb back to the trucks. I could feel the tentacles of cold seeping into my toes. The soles of my feet were numb.

We waited for the rest of the gang to join us.

In a short time, my father came striding up the hill, followed by a couple of other friends. When he saw our tracks his face got even redder than the wind had made it. He stomped up before us and demanded to know why we hadn't gone through the woods. My brother and I got the brunt of his lecture. Hunting was a serious thing with him; no one got away with such tricks. He looked up at the graying sky and turned to face us.

"All right, boys," he said, "we'll drive it this time. There's got to be some deer in there." There was determination in his gruff voice. After giving orders that standers were to string out along the pipeline, he led five of us back up the slope along the fence we had so conveniently followed out.

I didn't really care to climb the hill to the top, but had no choice. We toiled through the heavy snow at just short of a trot. If we hurried, there would be just enough time to swing through the woods. With rifles slung over our backs, we moved in single file like a band of partisans in an old war movie. We were hoping for just one last chance at a deer, for a lucky shot my father could make.

It took only a short time for us to angle back up the hill. I was the second to be dropped from the line, the second to watch the others walk out of sight, left to shiver and to stare out across the gray and white valley to the opposite steel-gray hill and the purplish ones beyond it. I didn't appreciate the view. Mostly I just shivered.

The Wind Knows the Way

The wind rustled the stiff branches of the denuded hardwoods. It's lonely to be abandoned in the woods with only the tracks in the drifting snow to remind you that you aren't really lost. It's as bad to stand waiting for a deer to pop out of the woods when your nerves are taut and the wind knows the way to penetrate any clothing made. I waited.

Slowly, time passed. Eventually the signal came to start the drive. I unslung my 308 Winchester and started through

the stand of young hardwoods. I passed into a thick cluster of pines. They were a wilderness of confusion, briars liberally clustered amid the discouraging land, challenging anything larger than a rabbit to test them.

I moved slowly, avoiding all obstacles I could. The light was pale green, and long meandering shadows played havoc with my sight. I walked as quietly as possible. Only the crunch of my boots, the creak of the sling as it stiffened, and the wind whining faintly in the pines registered on my ears.

I reached a slight clearing of fallen trees interspersed with a few briars. Out of the murk a deer bounded. I snapped the rifle to my shoulder as my heart began to thud heavily. I peered into my scope. The deer was gone. I knew I had not scared it too much and figured it had stepped behind some brush. Slowly lowering the rifle, I studied the mess before me, trying to find the deer.

Suddenly I saw a flicker of movement in the gloom to the right. It was the deer, running silently. I saw it weave through the brush, a fleet gray shadow. Try as I could, I was unable to find it in my scope. I should have flipped the scope aside and used my iron sights, but I was too excited to think about that. With a flick of its tail the deer disappeared behind the curve of the hillside. With some regret I crossed the clearing to a dense thicket of evergreens. Several fresh tracks showed in the snow. I heard nothing stirring in the trees.

I walked through the screen of trees. The rest of the drivers were clustered around my father, who was gesturing and talking. He looked at me and grinned. Although I hadn't heard the shot, I knew he had got a deer.

I was tired and cold, but I was happy for Dad. I settled the rifle comfortably in my arm and congratulated him.

Meanwhile, snow flakes sifted from the gray sky. The sun seemed to be as much a myth as summer was at that moment, just something to pin hopes on when it got cold and dark. My feet felt like blocks of wood. I wasn't shivering anymore.

The men slipped a couple of haystrings around the deer's neck and started the long drag up the hill. I unloaded my rifle and slung it on my shoulder. In the failing light, the season ended.

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RANGEMASTER TOM SLU
shooters to the benches.



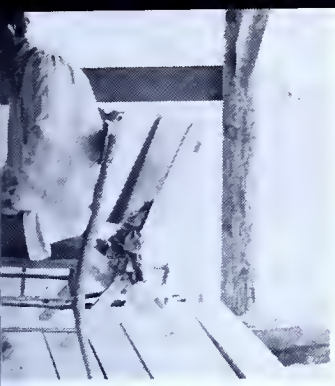
SHOOTERS, top, wait to weigh in rifles before match begins. Total weight of rifle/scope is limited by IBSA rules. Below, competitors on the firing line.

First IBSA Championshi

ON AUGUST 31 and September 1, 1974, fo history of the International Benchrest International 200- and 300-yard Benchrest held in the United States. Fifty shooters, Northeast, competed in the shoot, the first hel the Mainville Sportsmen's Club. The followi set, all in the 300-yard matches. Heavy Varmin .541", Bob White; five 5-shot-group aggregate Moorhead. Heavy Bench and Experimental .8013", Jack Reynolds; five 10-shot-group ag range measured, George Etter.







es to call a new relay of



LERALD SCHELL, center, president of Mainville Sportsmen's Club, with two of the winners, Ritchie Moorhead, of Athens, left, and George Etter, Spring City.

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FIELD NOTES

Oh, Yes, You Do!

LUZERNE COUNTY — I recently received a call from a young man who had just completed an application for our Training School. He asked if he would have to wear his hair as short as mine if he was accepted.—Land Management Assistant J. A. Booth, Trucksville.



Happy—Lucky—Hunter

BUTLER COUNTY — Last hunting season, I saw a hunter flush a turkey out of a field of high grass and weeds. He got off two hurried shots as soon as he recovered from the shock of seeing it in such an unlikely place. His expression, a picture of dejection after apparently missing the turkey, turned into one of disbelief when the turkey folded up in midair and dropped about 100 yards away. He ran over to claim his prize only to find that it had landed dead-center in a stripmine pond. With the aid of time, the wind and long stick, he got his prize.—District Game Protector W. N. Weston, Boyers.

The Birds are Coming!

BEAVER COUNTY — Recently at the Monaca High School, science class students were taking a test. The quiet classroom was shattered by an explosive sound and glass was strewn throughout the classroom. The teacher instructed all students to lie on the floor. When everyone had regained their composure, an eight-inch round hole was found in one of the windows. A dead grouse lay about twenty feet from the hole. I'm sure both teacher and students will remember the day the grouse came to school.—District Game Protector G. T. Szilvasi, Midland.

Quantrill Himself?

YORK COUNTY — Deputies David Muffley and Michael Sweigert were patrolling during small game season. They had pulled along a woodlot to watch for hunters when, all of a sudden, out of the woods came what appeared to be one of "Quantrill's raiders." The gentleman had a rifle slung over his shoulder, and was brandishing a pistol in one hand and a bottle in the other. He galloped off into the sunset on his pony. He was a bit oversized for his steed and wore a large flopping hat. After circling the farm, he came down over the hill toward the farmhouse and fell off the horse for the third time. The officers decided to speak to the gentleman for his own safety, as well as the safety of others in the area. It seems the gentleman was not hunting, but simply patrolling his property in his usual bizarre manner.—District Game Protector G. J. Martin, York.

Just Like Its Name

SNYDER COUNTY — Ron Steininger of Middleburg bought a new 20-ga. over and under shotgun for hunting grouse. Ron says it shoots just like its name—one shot over and one shot under each grouse flushed.—District Game Protector D. L. Myers, Selinsgrove.

A Case of Rage

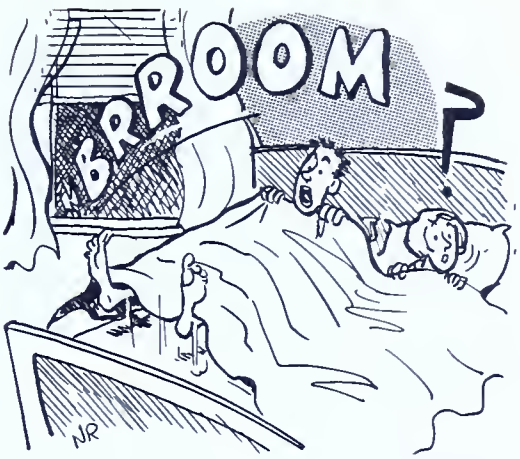
LUZERNE COUNTY — Harold Smith, of Nescopeck, has three tractors which he uses on his farm: a Case, a John Deere and a Massey-Ferguson. He also has a beautiful large ringneck rooster who doesn't have anything against two of the tractors but attacks the Case and chases it around the field. When he gets off the tractor, Harold can walk to within six feet of the ringneck and if he shuts the tractor off, away goes the ringneck.—District Game Protector R. W. Nolf, Conyngham.

Jim Finally Wins One

BLAIR COUNTY — After I write a Field Note on my report each month, my wife reads it and we set a little wager on whether it's going to be printed or not. If we don't soon start seeing more of these in the GAME NEWS, I think she will have taken enough money from me to do her Christmas shopping. Land Manager J. P. Shook, Claysburg.

Problems (Solutions)

MERCER COUNTY — We had two unusual complaints this month. First, a lady wanted an opossum removed from her attic. (It was a big gray tomcat.) Second, someone phoned in about a giant crow. (One of the wild turkeys we just stocked.)—District Game Protector L. P. Heade, Mercer.



Better Late than Never

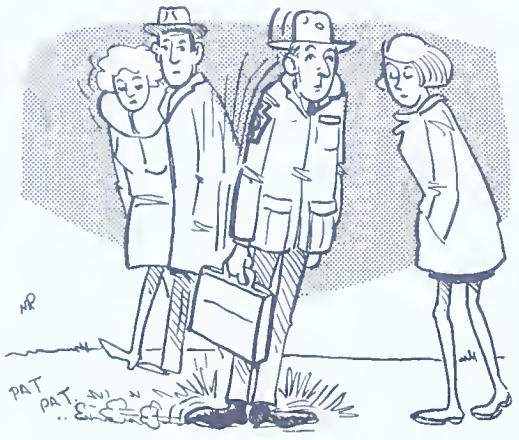
MONROE COUNTY — Waterways patrolman Walt Burkhart has had a ruffed grouse visit his bird feeder almost daily for approximately two years. This year, after the opening of early small game season Ruff wasn't seen for almost a week. Walt's wife Freta thought for sure that some hunter must have done him in. Almost a week later, Old Ruff let them know he was still around, for at 2:30 a.m. Walt and his wife suddenly awoke to the loud drumming of their friend just outside the window on his normal perch.—District Game Protector D. E. Overcash., E. Stroudsburg.

Works On Birds, but Deer?

SULLIVAN COUNTY — Deputy Clemons recently checked a vehicle stopped along a country road. Two men were standing alongside the vehicle and two others were down in the field with a flashlight. Much to my deputy's surprise, two young boys came out of the field, one with the light and the other carrying a salt shaker. Deputy Clemons shrewdly asked the boys if they had found any apples. "Heck, no, we're after deer," they replied. "You just put salt on their tails and then you catch 'em."—District Game Protector B. R. Hambley, Laporte.

Kick the Can

BEDFORD COUNTY — While checking small game hunters, I saw a gentleman walking through a field kicking clumps of grass while carrying a shotgun. I asked to see his hunting license. He said he didn't have one, and that he was just kicking the grass to flush out some tin cans. Needless to say, I didn't believe him and neither did the Magistrate.—District Game Protector B. L. Warner, Bedford.



The Ruby Slippers

DAUPHIN COUNTY — One morning, I got up earlier than usual to complete some office work before going to the Game Commission's Harrisburg office to pick up some supplies. I'd recently had a birthday and donned a pair of bedroom slippers (bright red) which my wife had given me. I arrived in Harrisburg, parked my car and headed toward the South Office building. Much to my chagrin, I realized too late that I was still wearing the slippers. I now define "eternity" as the amount of time it takes a Game Protector to walk 75 yards back to his car in downtown Harrisburg, in full uniform, wearing a pair of red bedroom slippers.—District Game Protector J. E. Schweitzer, Hummelstown.

Gotcha!

CUMBERLAND COUNTY — Deputy Jerry Daly heard this one. A group was hunting with the landowner's son, when a car pulled up and a man asked what they were doing on his property. Before anyone could answer the intruder then told them to get off his property as it was posted. The landowner's son said "Hi, Pop." The man asked him what he meant. "Well," the boy explained, "you must be my pop, because my father owns this property." The would-be landowner slunk back to his car and drove away.—District Game Protector J. P. Filkosky, Mechanicsburg.

Barnyard Shenanigans

BRADFORD COUNTY — John Cole of Mud Creek Road called me and wanted to know if he needed any type of license for his calf to chase rabbits. It seems his wife was looking out the kitchen window when she noticed that one of the calves was startled by something in a brushpile. Out hopped a rabbit. The calf gave chase and the rabbit ran fast enough to stay just ahead of the calf. After about 10 minutes, the rabbit had enough and exited under the fence and out of the pasture field.—District Game Protector W. A. Bower, Troy.

To the Victor . . .

CAMBRIA COUNTY — The office employees at Gallitzin State Park recently witnessed an unusual sight when they saw a marsh hawk swoop down and knock a killdeer out of the air. Speedily, it returned and killed the bird. But before the hawk could get its first taste of the meal, three crows descended and drove the hawk off. One crow kept the hawk busy, while the two others quickly devoured the hawk's meal.—District Game Protector D. W. Jenkins, Patton.



Bottomless Hole

PERRY COUNTY — Dr. O. K. Stephenson related this story to me about a not-too-sharp woodpecker. Like others of his kind, he hid acorns in knotholes and other convenient places. It seems this particular woodpecker had found a hole in a billboard and was seen flying repeatedly to the hole and dropping acorns through it. The doctor tells me there was an impressive pile of acorns on the ground below the hole.—District Game Protector B. K. Moore, Loysville.

Keep on Keepin' On

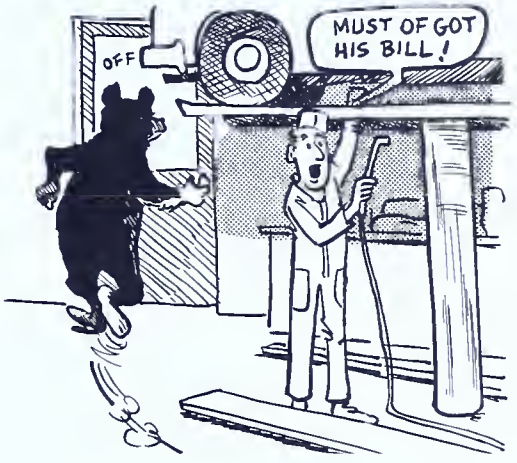
WAYNE COUNTY—The adaptability of wildlife never ceases to amaze me. While working in Philadelphia as a youngster (which is longer ago than I care to remember), I saw pheasants, woodcock, nighthawks, rabbits and other small game. Hunting was only twenty or thirty minutes away by either bus or trolley car. Since then, the whole area has changed and deer have now become a problem. Both Wayne and Pike counties are now undergoing the changes that I witnessed years ago as a boy. Buildings, lack of food and cover, and stress are sure to affect wildlife populations, but the odds are that some of the wildlife will make it if we help a little.—District Game Protector F. G. Weigelt, Galilee.

Higher and Higher

ERIE COUNTY — Recently a man brought in a gray fox to collect a bounty. He was disappointed when I explained that the bounty system had been done away with many years ago, then surprised when I told him most fox pelts are worth more now than the bounty.—District Game Protector A. C. Martin, Erie.

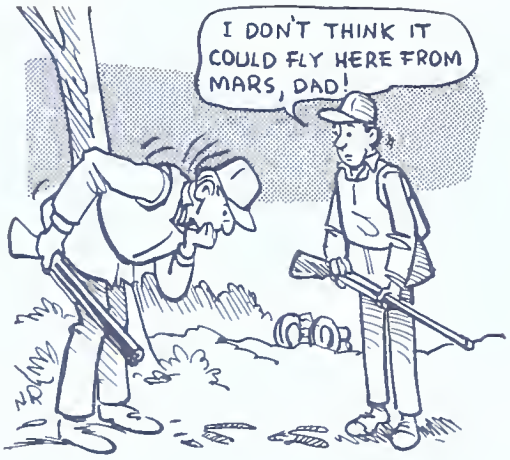
Thanks to the Hunters

FRANKLIN COUNTY—Non-hunter use of Game Lands is really in effect on State Game Lands 169. Our first pond in a series of eight is being used daily by boys and some adults; there's a well-worn path on the dike where the boys go with their bikes to fish and observe waterfowl; Shippensburg State College classes visit the pond regularly, and old folks use the mowed areas to sit beside the stream, fish and while away the time.—Land Manager P. R. Miller, Chambersburg.



Out for an Evening Stroll

CLARION COUNTY — One evening this past month a black bear ran into the open door of a nearby filling station, across the garage, past the grease rack where a man was working on a car, and into the office.—District Game Protector G. J. Couillard, Clarion.



A BIG Bird!

WASHINGTON COUNTY — At times I have been called upon to identify tracks supposedly of panthers, mountain lions, bears, etc. However, the other day an excited hunter stopped me to report finding the footprints of a large bird. The hunter, who was with his young son, said the toe prints were eight to ten inches in length. It turned out that the "Giant Bird Tracks" were nothing more than partially washed out tire tracks of a farm tractor. An embarassed hunter left the scene with his 12-year-old son saying "See, Dad, I told you so!"—District Game Protector J. M. Kazakavage, Washington.

Alas, Thy Words Sting

BUTLER COUNTY—During the Butler County Fair, I saw two elderly women slowly approached a mounted mink situated near an aromatic display of gardenias. Observing the mink, one lady discredited the furbearer by claiming it was a "mean, stinking blankety-blank." She knew about these critters because her son had trapped a few. Within seconds she noticed the sweet-smelling scent of the gardenias and quickly remarked. "That nice smell must be the flowers, it can't be the mink or him." With the "him," she pointed at me.—District Game Protector D. Martin, Prospect.

Balky Bear

UNION COUNTY—En route to work early one foggy morning, Ed Vance suddenly saw an object in the road ahead of him near Winter State Park. Thinking it was a parked car, he slammed on the brakes. When he finally got stopped, he was only inches away from a large black bear that was just sitting in the road. Horn blowing and hollering had little effect on the bruin. Finally, he gave the bear a nudge with his Scout, and only then did it move aside enough to let Ed by. Ed thought bruin was trying to hitch a ride.—District Game Protector J. S. Shuler, Lewisburg.

And Turkeys in the Straw?

SCHUYLKILL COUNTY—Squirrels in the attics, muskrats in the cornfields, raccoons in the sweetcorn, garbage cans and hen houses, rabbits and deer and woodchucks in the truck patches and produce fields, and geese in the grain. These are but a few of the complaints that a game protector receives about wildlife. If some of our uninformed anti-hunters had such personal contact with wildlife, they might be in favor of controlling these species through hunting.—District Game Protector S. L. Opet, Tamaqua.

Liberated Hens?

MIFFLIN COUNTY—It seems Women's Lib has entered the wildlife community. I recently observed 12 pheasant poults crossing the highway led by a cock pheasant. I then waited for a hen to cross the road and join the group, but one never appeared. The cockbird stayed with the feeding poults, and I had to wonder if it was his turn to babysit while mom had a day to herself.—District Game Protector W. H. McIntire, McVeytown.

CONSERVATION NEWS

By Ted Godshell

DEER, BEAR, TURKEY, ELK FINES INCREASED

FINES IMPOSED on Game Law violators who illegally kill deer, elk and turkey have been increased for the first time in 37 years. Unlawful bear killing penalties also were boosted at the same time.

Back in 1937, legislation was enacted setting penalties for the illegal taking of deer, elk and turkey. Fines of $200 were set for elk; deer penalties were established at $100; and lawbreakers paid $25 per turkey. The illegal bear killing penalty of $200 has not been increased since 1949.

Old-timers recall that $100 constituted a month's wages in 1937.

Effective November 16, the fine for illegally taking a bear or an elk became $400; the unlawful taking of a deer now will cost a violator $200; and the illegal taking of a turkey will produce a penalty of $50.

Legislation setting up the new schedule of fines also provides fixed penalties for mistake killings of deer, bear and elk, for possessing highway-killed deer, and illegally possessing live deer.

Under the new schedule of fines, a person who kills a deer, bear or elk by mistake will pay the following penalty: deer, $25; bear, $50; elk, $50. (Quarter penalties for mistake killings of all other wildlife species will remain the traditional 25 percent of the usual fine.)

A person who is found transporting or possessing a deer killed accidentally by a motor vehicle on a highway will be fined $100.

The penalty for the illegal possession of a live deer will now be $50.

In addition to the cash penalties provided, the Game Law further provides that the offender, under certain circumstances, shall be denied the right to hunt or trap in Pennsylvania for varying periods of time.



Photo by Leonard Lee Rue, III

FINES FOR THE illegal killing of several species of Pennsylvania wildlife, including elk, have been increased. Hopefully, this will reduce the number of violations.

Dyed Canvasbacks

Canvasbacks marked with colorful plumage dyes were recently released at key migrational concentration areas in the North Central states by wildlife research biologists of the U.S. Fish and Wildlife Service. The purpose of the color-marking program is to determine the migrational dispersal and wintering distribution of canvasbacks staging on the Upper Mississippi River. During the 1974 fall migration, male canvasbacks were dyed different colors at concentration areas near LaCrosse, Wisconsin, and Keokuk, Iowa. The colors used were blue, yellow, and pink. Any observation of color-marked canvasbacks should be reported to the Northern Prairie Wildlife Research Center, P. O. Box 1747, Jamestown, North Dakota 58401. The following information is requested: observer (name and address), date, time, location of observation (be specific), and color of the bird (be descriptive). In addition, information on the activity of the bird, size of the flock, and species of ducks associated with the marked bird would be helpful. This research on the migrational habitat and destinations of the canvasbacks is part of a comprehensive investigation to identify major factors influencing the population status of this species. Any observations of these color-marked canvasbacks would be greatly appreciated.

Venison Recipes

When grinding venison I prefer to use beef rather than the pork that so often is called for. The least expensive cuts of chuck are best as they usually have the needed fat and the flavor is excellent. A mixture of two parts venison to one part beef has worked very well for me. This ground meat makes the best meat loaf, meat balls and hamburgers my family has ever had.

Venison Stew

2 lbs. venison, cut in cubes
2 heaping tablespoons bacon drippings
2 bouillon cubes (beef)
1 medium onion
potatoes
carrots
green beans
tomato sauce (optional)

Brown meat and onion in bacon drippings in large pot then add water and bouillon cubes. Boil slowly until meat is tender. Add potatoes, carrots and tomato sauce. Cook until vegetables are tender. Add green beans, then thicken.

Meat loaf

3 lbs. ground venison/beef
1 package dry onion soup mix
2 eggs
¾ cup wheat germ

Mix ingredients, shape loaf and bake in 350° oven for 1 ½ hours

I have also found that using tenderizer on venison steaks can be very helpful. Due to the lack of fat in the meat it can become quite dry and even a marinade does not seem to help at times. Use tenderizer as directed and quickly pan fry steaks in a heavy skillet with a small amount of grease. This method works very well for me.

—Mrs. Wm. E. (Pat) Workman

Days of Yore



1916 HUNTING TRIP TO SNYDERTOWN, Northumberland County, resulted in 15 rabbits and four grouse for John Snyder, of Pottsville, Joe Tice, Charles Ochs, Fred Yoder, and Lee Miller, all of Pitman. All are now deceased except Mr. Snyder. Photo from James Tice, of Hershey.

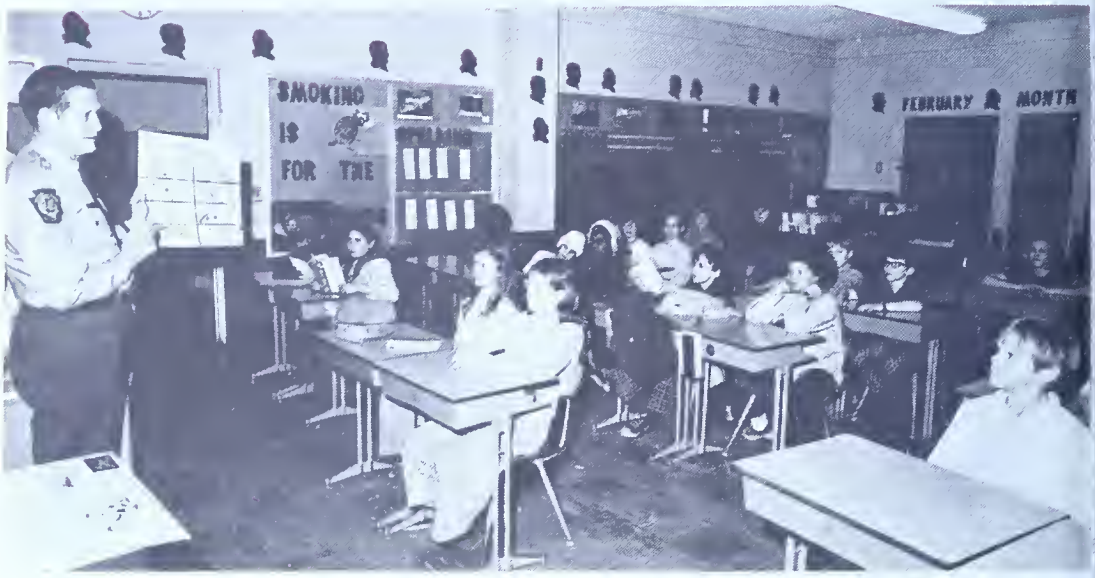
Books in Brief. . . .

(Order from publisher, not from Game Commission)

A Hunter's Fireside Book, by Gene Hill, Winchester Press, 460 Park Ave., New York City 10022, 162 pp., $7.95. Every so often a book comes along that all outdoors people should read. To miss it is simply to have a hole in one's experience that can't be filled in any other way. William Harndon Foster's **New England Grouse Shooting,** reissued a few years back, was one such. Another is this collection by Gene Hill. Nobody around can excel Hill at extracting the very essence of a perfect—or imperfect—day afield and presenting it in a few paragraphs we can savor over and over again. In more than seventy pieces he touches on just about everything that interests hunters and shooters, from woodcock guns to the hunter's moon, from brushpiles to the High Sierras. Best of all is one called "The Stranger." I'd rather have written these thousand words than Camus' entire novel by the same name. Nicely illustrated by Milton C. Weiler.

Dove Shooter's Handbook, by Dan M. Russell, Winchester Press, 256 pp., $6.95. Probably more shells are fired at mourning doves than at any other gamebird, yet most hunters know very little about this creature. Russell, both a hunter and a wildlife biologist, gives the answers on this species.

North American Big Game Hunting, by Byron W. Dalrymple, Winchester Press, 384 pp., $10. Down to earth advice on all phases of hunting for our bears and antlered and horned trophies—the where, when and how to do it. Even imported exotics are covered. With all this, perhaps the most important chapters, at least to the not-quite-experts, cover the basics of hunting, tell how to choose the proper equipment, explain how to determine what is and is not a genuine trophy. Most of the book of course is based on Dalrymple's wide experience, but sections were contributed by Erwin Bauer, William Huey, Charles Elliott and Hal Swiggett, each a recognized authority in the area he deals with.



DISTRICT GAME PROTECTOR Paul Ranck speaks to Williamsport youngsters.

TENACITY HELPS HE EFFORTS

By John C. Behel

PGC Hunter Education Coordinator

"TENACIOUS" is the word that best describes Paul Ranck, Williamsport area District Game Protector for the past 26 years. Paul's tenacity is evident in his persistent contribution to the teaching of hunter education and providing for the safety of youngsters involved with guns and hunting. This has been important to Paul, for Williamsport is one of the hubs of hunting activity in Pennsylvania. In this area, where most families possess guns and the majority of youngsters either hunt or are exposed to guns, hunter education has been one of Ranck's major assignments.

Realizing this high interest and looking for a better approach to teaching, DGP Ranck started hunter education classes for young people in the Williamsport school district long before they became compulsory for all first-time hunters under 16 years of age. Paul approached Richard Bittner, principal for the Williamsport area schools, to develop a program to train beginning hunters. Mr. Bittner, a certified hunter education instructor himself, was receptive to this request and asked for school board approval. The board quickly agreed to support this new approach to hunting and gun handling.

Each year from January through April, a schedule of training is arranged for 30 classes of instruction with 10 schools in the Williamsport School District, the South Williamsport District, and the Loyalsock School District. The first class was held in 1963. It was sponsored by the local Lion's Club and taught by instructors from that club and from the Lycoming County Consolidated Sportsmen. Since the first class, over 7000 students have successfully completed hunter education through the school program. In addition to supervising the school classes, Paul also assists the Lycoming County Consolidated Sportsmen, who sponsor an annual hunter education and shooting instruction field day for all sixth grade students.

DGP Ranck's investment in hunter education has been returned tenfold. Hunting accidents involving young hunters are lower in the Williamsport area than anywhere else in the state. Paul draws on teaching skill and wisdom, as well as experience in investigation of careless hunting accidents, to teach his course. Presenting the dangers of firearms and showing how careless acts can be eliminated seem to be the best lessons taught. The course consists of five hours of instruction in gun handling and hunter responsibility, and heavy emphasis is placed on safe handling of firearms at home as well as in the field. Ranck explains to parents that all children should avail themselves of the course, whether they intend to hunt or not. Even though the child may never own a gun and may never hunt, other members of his or her family may. The proper handling of firearms is a proven deterrent of home firearm accidents.

Outstanding stamina and persistance have been this man's trademarks throughout his conservation career. The Game Law violater can attest to his tenacious law enforcement efforts; so can this writer, having worked with DGP Ranck in the past. Even though he has been plagued by a severe illness, Paul's work and hunter education school schedules have not been delayed or postponed.

Much can be said about this Game Protector's efforts in wildlife conservation and law enforcement, but he will probably be best remembered by the thousands of youngsters, both hunters and non-hunters, whom he has taught.



PGC Photo by LEA Bob Myers

KATHY KUNKLE, shown with Instructor Ervin Schlecht, Sr., and Norman Mertz, won one of the trophies presented by the Lehighton Sportsmen Club in connection with the Hunter Education course given there.

Safety In Numbers



SANDY SESLER, Carlo Lonardi and Susan Faust, shown with Walter Wise, were numbers 999, 1000 and 1001 in the Hunter Education program presented by Harrisburg Hunters and Anglers Club.

National Hunting & Fishing Day saw many thousands of young hunters participating in hunter education courses throughout Pennsylvania.

For Walter Wise, well-known hunter education instructor with Harrisburg Hunters & Anglers, it was also a day of personal satisfaction. His class of 76 students brought to 1014 the number of youngsters he has taught hunter education to. That's a lot of safe hunters provided for any state's safe hunting program by one man. To some, only the numbers may be significant; but to Walter, they represent the kids, hunting and their safety.

From the beginning of Pennsylvania's Compulsory Hunter Education Program, Walt has pitched right in with the many thousands of other volunteer instructors. Sportsmen's club activities and his job as a Pennsylvania State Policeman have never been barriers in teaching gun safety. He has always found time to consider young people and their safety. Organized hunter education classes have been his bag, and his students have received excellent teaching from this well-qualified instructor.

Walter Wise's tenure with the Pennsylvania State Police has included activities as a firearms expert, and as coach and trainer of one of the best revolver teams in the country. This alone would vouch for his thoroughness in teaching, but for youngsters and hunter education he gives even more consideration. In both the coaching of pistol marksmanship and his hunter education teaching, one of his most important demands is total concentration. As Walter says, without concentration a first-time hunter could well miss a point of teaching most important in preventing a hunting accident.

Walter Wise, marksmanship instructor for the Pennsylvania State Police and immediate past president of Harrisburg Hunters & Anglers, is doing his thing for youngsters. He is truly one of Pennsylvania's extraordinary hunter education instructors.

Vireo Camouflageo

The red-eyed vireo is one of Pennsylvania's most common birds. However, it is not often seen because it frequents the tops of trees where its light undersides blend with the pale undersurfaces of the leaves.

Getting "The One that Got Away"

By Frank Jackson

IN THE JUNE, 1973, issue of GAME NEWS, I told the story of my 1972 archery hunt, when I bagged the heaviest buck taken by bow and arrow in the state. In the same article I also told about a bigger buck I saw that got away. My 1972 trophy weighed 227 pounds field-dressed and the antlers scored 132-3. This placed him second in the Game Commission's 1973 measuring program. Let me tell you what happened after I wrote that story and told about the big one that got away.

I belong to several archery clubs and shoot my bow year-round. The Stag Shop, which is an indoor archery range in Croydon, is full of bow hunters during the winter, and this is where I met my challenge.

Mike Tag, president of the club and an expert hunter, congratulated me on my kill but then started to heckle me good naturedly for saying the bigger one got away. Mike said I would have to prove this. He and his friends figured that seeing one trophy that big was rare, but to spot two in the same area so close to the city was pretty near impossible.

Just a Look

Mike said he would hunt with me in the '73 season, and if he just got a look at this other so-called trophy, the Stag Shop would pay for the hunt for both me and my son Charles. We agreed. Mike, Charles and I made five trips to the area we intended to hunt before the season started. No one saw the big buck.



FRANK JACKSON with "the one that got away" in 1972—but didn't manage to escape two years in a row. When Jackson saw him in 1973, the rack seemed so big he thought he was looking at an elk.

By this time, the boys were really giving me the I-told-you-so's, and I was starting to doubt if I really had seen that other buck.

The season finally opened, and all we saw were does for the first three days. Then on the fourth day it happened. I was sitting in my tree stand, and out of the corner of my eye I saw a deer about 45 yards to my left. There was no mistaking him—he was the King of the Woods, the big buck I had seen the year before. I saw so many points it seemed that I was looking at an elk.

The buck walked away from me toward Mike's stand. I couldn't take a shot because some trees were in the way, but I was so excited I don't



THIS IS THE buck Jackson collected in Hickory Run in 1972. Its 132-3 antler score took second place in the Game Commission's most recent measuring program. Field-dressed weight was 227 lbs.

even know if I could have found the strength to draw the bow. My hands were clammy as I watched him walk out of sight. Mike was watching two does feeding at the time, and he noticed them prick up their ears. He turned to see what they had heard, and he spied the King.

For some reason, the buck turned and walked away from Mike before he could get a shot off. The deer walked back toward my stand, and when he was about 25 yards from me he turned to the side, giving me a perfect shot. I had my Wing Thunderbird 43-lb. bow at full draw, and I was ready. I released my microflite glass arrow and saw it hit the deer in the chest cavity. He took two leaps, walked in a big circle and fell down. The hunt was over; the King was dead.

This brought my bow hunter's dream to a happy end in the woods of Pennsylvania. I'm kind of sorry to say that I know of no other big buck that got away, but I guess I've already gotten more than my share. Fellow sportsmen, I leave it up to you. Was the "buck that got away" bigger than the one I got in 1972?

Mike thought he was . . .at least he paid for the hunt. And incidentally, that ended the heckling.



WINNING DESIGN for the 1975 federal duck stamp, left, was created by Pennsylvania wildlife artist James L. Fisher, of Oxford. Fisher's design, the first he ever submitted to the annual competition, breaks with long-standing tradition by featuring a weathered canvasback duck decoy. The model was a Mason factory decoy from the collection of Robert Biddle, Media. Fisher's painting was chosen from 268 entries. Photo by James P. Fisher, Jr.

Handgun Shooting: A Family Affair

By Susan M. Pajak

IN DAYS GONE by history tells us that on numerous occasions a slip of the tongue, milady's honor, the family's name, (an extra ace hidden in a cowboy's boot?), or any other questionable word or act—even downright revenge and hate—quickly demanded "a duel to the finish" at so many paces between the supposed honorable individual and the supposed offending rascal.

The weapon usually chosen was either the revolver or the pistol, both rightfully categorized as handguns because they are held easily and comfortably in or with one, or both, hands.

Fortunately, those "gunslinging" days are over. But the wholesome desire to become a proficient handgun shooter remains; it is a challenge yet unto this day. The most difficult firearm to shoot accurately, at least in my opinion, is the handgun.

(I think those cowboy movies and "wild west" stories overdid it a bit, and unfortunately they left many of us with an indelible but mistaken idea about the accuracy of handguns. Today's TV also often shows some handgun shooting by the good guy, the villain, or whoever, that for the most part is sheer nonsense.)

But as with any type of firearm, the primary requirement for safety with handguns is, of course, *don't point it at anyone.* With a short-barreled handgun this is easier to do than you may think.

Handgun safety is also the way it is with the Serfozo family of North



THE SERFOZA FAMILY—shooters all. Mrs. Irene Serfoza with her Iver Johnson 22 revolver, daughter Dianne with a 9mm Browning autoloader, Vickie, Bob, Jr., and Mr. Serfoza.

Huntingdon Township, Westmoreland County, who all together enjoy handgun target shooting.

"Because of the handgun's relatively small size," says the father, Bob Serfozo, "it is understandable how and why an uninstructed beginner sometimes manages to point it at everything in sight within only a few seconds. Just the act of examining a handgun—the action, the barrel, or even the workmanship—can often bring the muzzle directly into line with something. However," Bob continues, "any individual who is properly coached

GIRLS, GUNS, & GAME...



UNDER THE EXPERT tutelage of her father, Dianne Serfoza prepares to squeeze off a shot from 9mm Browning. Proper instruction makes even this powerful firearm easy for the young woman to handle.

and instructed can learn to handle handguns safely."

Bob and Irene have been target shooting with handguns for a good number of years and they have introduced their children as well to such shooting. They've proved it's a family affair.

There are three basic types of handguns: the single action revolver, the double action revolver, and the so-called automatic (more popularly, the semiautomatic or autoloading) pistol.

A revolver is called a revolver because the *cylinder* which holds the cartridges turns or revolves to put a new load into firing position when the *hammer* is cocked. A single action revolver is called that because it can be fired only one way—by pulling the hammer all the way back to full cock, usually with the thumb, and then pulling the trigger. A revolver's cylinder usually holds six cartridges.

A double action revolver is called that because it has a mechanical system that allows it to be fired two ways. No. 1: just the act of pulling the trigger will cause the cylinder to revolve and fire a cartridge—one pull, one shot; and No. 2: it can be fired like the single action.

An interesting story about why a pistol is called a pistol, and other related facts, will be coming up soon.

° ° °

The SMP Dill Pickle Award for 1974 goes to those who decry hunting as inhumane and vulgar while merrily chomping away on a steak or a hamburger. I would like to ask these persons . . . just how do you think that steak became a steak and that hamburger a hamburger?



MANY LETTERS TO ROUNTREE request information on equipment for outdoor sports; others supply him with good tips.

"Dear Les"

By Les Rountree

ONE OF THE most interesting things about writing this column is receiving letters from the readers. Whenever I do a cooking piece I can count on getting a pile of mail from the recipe fanatics. Since I like to cook as well as eat, this kind of correspondence is always welcome. There are also the usual pro and con letters about certain products or techniques. Most of these letters are pretty well thought out and in some instances have changed my mind completely about a given subject. Other letters start off, "Dear Les . . . you nut!" . . . or "Dear Mr. Rountree: Sorry to hear about your complete mental collapse." Those letters that begin *that* way usually take me over the coals about something. But they are fun to read too and if I didn't get letters from time to time I'd feel as if I were writing in a vacuum.

Many of the letters are hilarious, especially those from kids who look at matters purely objectively. Sometimes they make a lot of sense. Anyway, in looking around for a way to kick this year off, I'd like to share some of those letters with you . . . . along with some of my replies. Some are serious and some are not and at times, it's tough to



IT'S ALWAYS A GOOD idea to check out a new item of equipment before taking it on a trip. If something is wrong, it's better to find out about it at home rather than miles back in the bush.

tell the difference. Here are some samples.

Dear Mr. Rountree:

I have been reading your column for about a year and you finally convinced me. Last spring I bought hiking boots, a nylon tent, backpacks and the whole mess for my wife and me. We tried this backpacking thing and have decided that you are a sadist. We both got blisters, my wife developed a case of poison ivy that took three months to clear up, the raccoons ate all of our food the first night out and it rained every day. Backpacking is for the birds! From now on, my camping is going to be done in Holiday Inns.

Now, this one was tough to answer since obviously this guy had made up his mind. I wrote a sympathizing letter that said in effect, "different strokes for different folks," and let it go at that. We aren't all cut out to be Davy Crocketts.

Dear Les:

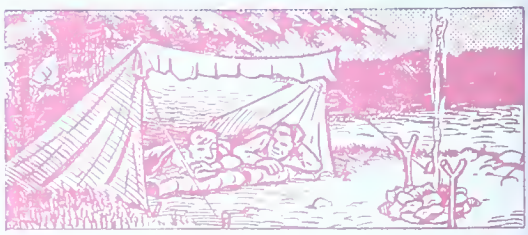
My Dad helped me with this letr but he really didn't want too. I am 6 years and think thats old enuf to own a shrp nife. I reed you article about nifes and you said every out door man should hav a shrp nife. Me too. I am out doors alot. I ned to hav a good nife. Dont you think so? I woud not cut in trees with a nife if I had one."

I probably got in all sorts of trouble with my reply to this letter. I advised the boy that a pocket knife and a boy do go together. But before they are given a sharp "nife" they should receive some very careful instruction in the use of one. Six years of age may be crowding it just a bit, but surely by the time most boys are eight they are mature enough to understand that a knife is a valuable but sometimes dangerous tool if misused. Every boy who ever craved a neat looking pocketknife should have one. For the first knife, always buy one with a lock open blade that won't go shut accidently. Good advice for older backwoodsmen too. Any knife that folds should have a lock open feature if it's going to be used for rugged work.

Dear Mr. Rountree:

You are always talking about down filled sleeping bags and down filled jackets. Don't you like wool coats and jackets? They keep you warm too and don't cost as much as down clothing.

A number of readers have noticed my preference for down garments. I freely admit that I am partial. But wool is warm too and it offers several styling advantages that



down cannot match. The good looking (and warm) jackets that come in a variety of styles from a number of manufacturers are very serviceable and attractive too. The chief advantage that down has over wool is weight. More or equal warmth can be had from a down filled jacket that weighs a few ounces than from a wool jacket that weighs several pounds. For all day walking that's important. In the underwear department, nothing is much warmer than wool longjohns. I can't wear them, however. My skin is a bit sensitive to wool and I get the creeping itch from it. A blend of half wool and half cotton seems to be much better itch-wise and nearly as warm.



DESPITE Rountree's oft-voiced opinion that down is the top insulator for winter clothing, wool and manmade fibers also are excellent choices, as one reader points out.

Dear Mr. Rountree:

Frequently, in your column you talk about taking a "milk run" with a certain piece of equipment. What does this mean?

Well, that's an old country expression that means trying something out before you have to use it for *real*. In the case of tents, it involves setting them up in the yard and making sure you know what all the ropes and pegs are used for. A pair of hiking shoes should be walked around in quite a bit before you hit the trail. Another way of putting it would be, familiarizing yourself with the equipment. With anything mechanized this is imperative. I well remember the time Ann and I set forth in a brand new motor home that had more gadgets on it than a space ship. We were on the road ten days and didn't fully learn how to operate everything until the last day. I never did learn how to pressure up the water system. Oh, sure, there are instruction booklets with almost everything but nothing beats actually doing it. Your driveway is a much better place to be when firing up a pilot light or cranking a generator on a new rig for the first time.

Dear Les:

You said in a recent column that a backpacker should carry a one-burner alcohol or propane stove. What's the matter with building a fire instead of carrying the extra weight around? From an environmental standpoint, it's better . . . . we wouldn't be wasting fuel.

I've got to admit that this reader has a point. Trouble is, some people are just not very careful with fires. On state land it's forbidden to start a fire except at controlled picnic areas or campgrounds. On some trails the trees for miles around have been hacked at until it looks like a battle was fought there. Firewood is hard to come by unless one cuts down a green tree and that's not good firewood anyway. It smokes



ONE READER wants to know how to recognize pure water in the outdoors, but Rountree's reply indicates this can't be done, that all water should be purified before drinking.

too much if it burns at all. It's actually easier to cook on a small one-burner stove than over an open fire and while it isn't so romantic, it's cleaner and far less apt to cause problems. The amount of fuel used by backpackers does not contribute much toward a fuel shortage, but for heaven's sake, don't throw that propane container away. Bring it back to base camp and dispose of it in the proper trash can. What the packer really needs is a small, refillable propane container. That would really be environmentally sound!

Special note - Owners of white gas stoves have asked about using the new unleaded gas in them. The answer is: unless it's an emergency, don't! Plain white gas or the prepared camp stove fuel that many companies market, is the best possible fuel. Continued use of unleaded gas or the juiced up leaded variety will eventually clog up the nozzle.

Dear Les:

You never talk about snowmobiles trail bikes or all terrain vehicles in your column. A lot of people have fun on these machines in the outdoors. Why don't you discuss them?

I must be honest about this. I don't own any mechanized conveyances except a car and an outboard motor. It isn't that I'm anti-snowmobile (although I am concerned about ATVs and trail bikes). I just prefer to enjoy the out-of-doors without the noise that goes along with the snow machines. When there is a good covering of snow and the user *picks his trails wisely*, the damage to the environment is minimal.

I don't approve of using a snowmobile for "viewing" game in the winter time because that often leads to harassment, even though the snowmobiler doesn't intend to do that. Game, especially deer, is usually much less active in the winter than in other seasons, and prolonged snow and cold weather can seriously reduce its stamina. To make it through the rigors of winter, a deer sometimes needs every break it can get. Besides, enough other magazines talk about snowmobiling.

Trail bikes and ATVs are another matter entirely. There are justifiable reasons for four-wheel drive vehicles and other off-the-road machines to travel on fire trails and old railroad grades and the like. But for cross country adventures that lead through fields and woods in an indiscriminate fashion . . . . I'm against 'em. Just last spring after witnessing a group of amateur Evel Knievels cavort around a brushy field, I found four pheasant nests

that had been totally destroyed. There were probably more that I didn't find. Hiking trails are soon badly rutted if enough trail bikes use them and most campground owners have totally banned mechanized two-wheelers. Too destructive. In general, my philosophy is that wheeled machines are made to run on roads made for them and not through fields and forests.

Dear Mr. Rountree:

How do you tell if a certain spring is safe to drink from? I've been told that if a spring bubbles up out of rocks, it's a good bet that the water is okay.

I've also heard that if trout live in the water it's safe to drink, or if salamanders are in it, it's OK, and there are a dozen other old tales about how to spot safe water. But there really isn't any way to tell for sure, short of having it analyzed. Some springs are marked as being safe or unsafe and well traveled trails usually offer good drinking water. That's the reason that the trail probably became a hiking trail in the first place. But just because a certain spring has good water this year doesn't mean that it will be good the next year. If the water is questionable, it's a good idea to boil it or treat it with water purification tablets that are sold at many camping supply stores. Forget that stuff about water coming out of the rocks. In the limestone country of southcentral Pennsylvania, polluted water can sometimes follow the rock faults for tremendous distances underground. Trout and other fish frequently live in highly contaminated water, so their presence is no proof that water is pure.

Dear Mr. Rountree:

I'd like to spend more time out of doors in the summertime but I'm really afraid of poisonous snakes. I'm a newcomer to Pennsylvania and I've heard that there are lots of rattlesnakes in the Allegheny Mountains. Where can I go in this state and be sure of finding no dangerous snakes?

Some kind of poisonous snake has been found in nearly every county at some time or other. We have copperheads and two subspecies of rattlers. Your chances of coming on one by accident are relatively slim, since most pit vipers are nocturnal by nature. I have found plenty of snakes when I've been looking for them, but I can only remember three or four instances when I've come upon one by surprise. Usually, the snake hears you first and gets out of the way. You'll never know he's there. There are usually only two or three snake bite cases reported in Pennsylvania each year and most of those are suffered by "snake handlers" who get a bit careless.

To finish this up, let me mention again that every letter that is addressed to me in care of GAME NEWS gets answered. It has long been the policy of this magazine to answer all mail except the really "nutty" type of question, or hate mail. The editor wants it that way . . . . and so do the writers.

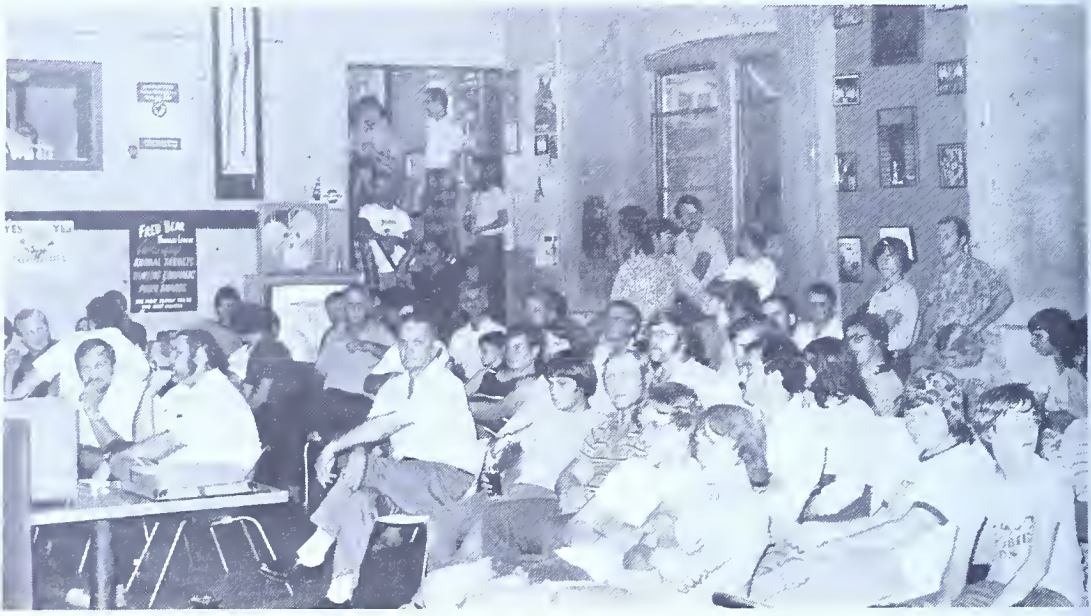
Happy New Year!

A Slant On . . . .

Public and Private Relations

By Keith C. Schuyler

Photos from the author



PART OF THE ARCHERY CROWD that came in out of the rain at the Eastern Bow Hunters Seminar in Easton last August.

IN WHAT WAS billed as "Eastern United States Bowhunters Clinic," some 135 interested archers dodged heavy rain for an August program in Easton that served an important dual purpose. It hit both sides of the need for information in this fast-growing sport—public and private.

The public side of good relations was served by advance publicity that let the populace in general know that there is more to bow hunting than killing a deer. Private relations came through in the personal approach to the program that provided usable and entertaining information for those attending. And, top talent was assembled for the event.

Sponsors were first to admit that this was a modest showing for such an impressive billing. On the other hand, it was an impressive expression of interest in face of one of the weatherman's better prognostications. For, as predicted, there were heavy storms. In fact, rain drove the crowd from Wilson Boro Bandshell to the shelter of Dave Staple's Spectre Archery Lanes four blocks up on Northampton Street. A bad break such as this could normally be counted upon to disperse the crowd, but there was little if any loss. It took some fast maneuvering to accommodate the damp but determined audience.

Game Protector Dick Fagan, Lehigh County, kicked off the event with a meaningful resume of the ins and outs of bow hunting. His talk centered around the approximate breakdown of the 10 percent who hunt, the 10 percent who are against it, and the middle 80 percent who have no opinion. He made

the important point that bow hunters must police their own sport to have a desirable influence upon the major percentage of people who take no stand for or against such hunting. In total, DGP Fagan emphasized the need for a constant code of ethics in the privacy of the hunt to maintain a proper public image.

On display was the growing collection of hunting arrowheads owned by Rit Heller, Reading, who spoke briefly about his hobby (see Oct. column, "Getting a Head"). The collection itself was a focal point of interest before rain interrupted proceedings.

Len Cardinale, nationally known bow hunter, Belleville, N.J.; Sherwood Schoch, several times Pennsylvania state champion and professional archer; and Joseph Rusinek, chairman of the Archery Hall of Fame, from Baltimore, Md., provided the instructive portion of the seminar. There was heavy emphasis on use and care of the compound bow which overcame controversy to become the hottest item of archery tackle in 1974. Dave Staples, former president of Pennsylvania State Archery Association, presided over the program which was sponsored by Easton Bowhunters League. Henry Fullmer provided a film covering the manufacture of archery tackle at the Bear factory, Grayling, Mich.

The preceding, in brief, is some of what it takes to conduct a successful archery seminar, whether it is for target shooting or bow hunting. Since either is somewhat essential to the other because of overlapping interests, the important point is the lasting value of an activity that spells education. It has been this writer's privilege to attend other seminars. In each instance, those attending have been enthusiastic both during and after the event. The four-hour Easton program actually ran overtime because of the weather interruption, but there was no noticeable shrinkage in attendance.

The Easton clinic, or seminar, is used here as a vehicle for my thoughts merely because it was illustrative of the usual interest that such a program generates. The purpose is to encourage such programs throughout the state.

Summer at Stone Valley

Another example was the bow hunting seminar sponsored by Penn State University late last summer at Stone Valley, site of the annual archery instructors' school of the National Archery Association.

Most important to the fact is that countless archers at various stages of experience and skill enjoy and profit by such a venture. It implies a responsibility for those who are steeped in archery, whether on an amateur or a commercial level, to make such programs possible.

And, they are possible throughout Pennsylvania.

Too often those in outdoor sports shy away from what might be considered commercialism. There are those who resent it if someone, even though that someone must depend upon the sport for his living, offers to sponsor something for the possibility of personal promotion. Well, *if* it has been a secret to now, consider yourself privileged to the knowledge that little in amateurism is without some commercial connotation. True, outright advertising is frowned upon or forbidden at amateur events, which is as it should be. But who turns down a prize for high score because it came from Sam's Sportsman's Shed?

Because commercial interests are just that, advertising value is necessary.



Normally, all the fellow who helps to insure the success of an amateur venture expects is that those involved be made aware of his practical interest. He hopes that there will be enough sense of appreciation that his business will be patronized. Fair enough? Sam will continue to help if he sees that it helps his business. He is in the habit of eating and doesn't want to break it.

One of the very best places to get help and promotion in archery is at the local pro shop. If the fellow who runs it is knowledgeable (and he won't be around long if he isn't), he is acquainted with all the best archers over a wide area. In addition, he of course knows all the archery road salesmen who, in turn, know an even greater number of top archers across the country.

Top archers in knowledge are often, but not always, those who shoot top scores. More important to a seminar, clinic, symposium—they are all roughly the same thing—is the man or woman who can get information across to an audience. Many of the National Archery Association Instructors who are graduated at Stone Valley each year aren't seen on the winner's dais at the big tournaments. They go there chiefly to improve their knowledge and to learn how they can best impart that knowledge to others. Many would be delighted to be called upon to help.

The Same Face

Most important about a program designed to disseminate information, whether it is on target shooting or bow hunting, is that each in the audience wears the same face. By this I mean that there is no way to determine the ability or inability of any given person in attendance. Unfortunately, at a tournament, no matter what effort is put forth to minimize importance of the scores, those of lesser ability will often shy away in fear of embarrassment. Yet few of these will refuse to watch, listen, and frequently even try to emulate the instructor if given the chance.

At what I prefer to and will continue here to call a *seminar,* there is an excellent opportunity to feel out those who participate and to offer them an invitation to meet at the local club. It shouldn't be one of these, "Give me a call some day and I'll be glad to shoot a round with you." Rather, set a certain time and date. You may acquire a friend and a new member.

Open Invitation

In fact, there is no better time than during a seminar to issue an open invitation to all nonmembers to utilize the local club at a certain time on a certain date. Let it be known that there will be regular members present to call upon, but *only if they are requested.* Then, when visitors do show up, simply tell them how to find the targets and turn them loose. If they want assistance, they'll ask for it.

Even if they start out alone, they may come back to ask for help to find lost arrows.

As in a seminar, it is important to refrain from forcing instruction on any one person. The fact that they may obviously need help is much less significant than their desire to stumble along independently. When, and if, they finally start to ask questions is time enough to be of help—at whatever pace the newcomers set for themselves.

An idea which worked at our local club, as long as it was used, was to advertise that there would be a special class for nonmembers at the annual big-game tournament. The only restriction was that participants had never shot in any tournament before. Entrants paid the regular tournament fee, but winners in their group received identical trophies to those given in the regular shooting classes. Seven entered the first year. Most of them later joined; two became officers of the club in ensuing years.

With the vast army of bow hunters in Pennsylvania, which now exceeds the total number of *all* hunters in many states, the need increases for dissemination of knowledge about the bow and arrow. Lack of basic information is appalling in many instances.

Of course, there are those who can't be enticed no matter how attractive an opportunity is provided. Many of these comprise the small percentage that are a threat to any activity—particularly one which is vulnerable to attack because of so little specific knowledge on the subject.

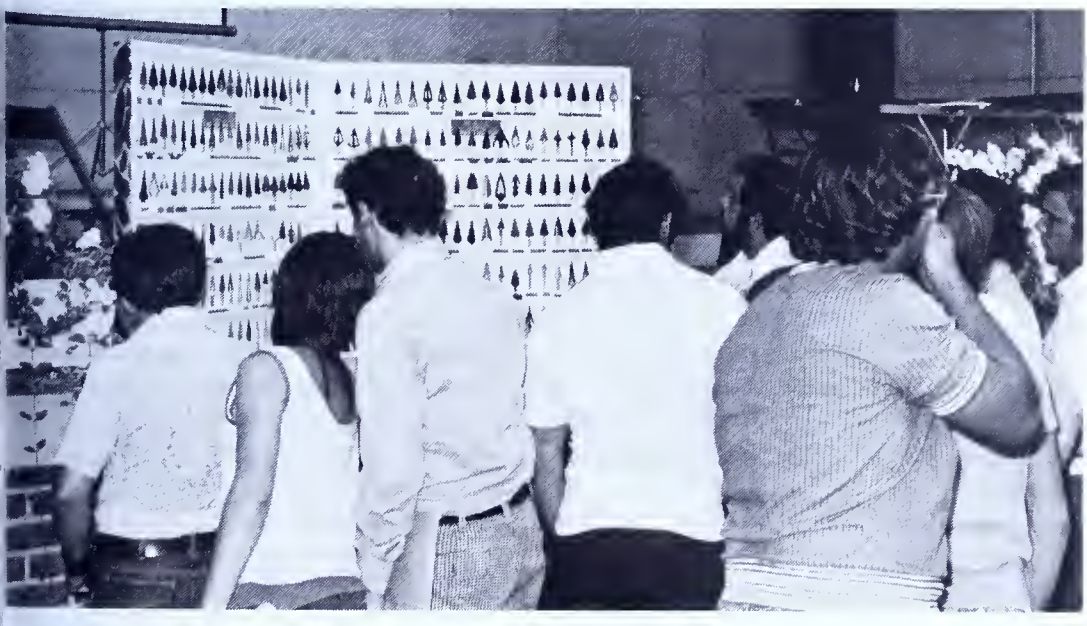
The latent desire to compete at any level of achievement is in all of us. Oh, we hear the old baloney of, "I just like to compete against myself." This may have an element of truth, but it is more likely an excuse to avoid getting knocked down by someone better. Nevertheless, this person shouldn't be pushed into going away by himself forever. Give him time. As soon as he is reasonably sure he can beat *someone*, he'll try. If he wins, he's hooked. He may even be the next club president.

So, with most of a year ahead of us before the next hunting season, right now is the time to plan for and to hold seminars in your area. Be sure you have the right talent to perform, then publicize the thing so that you are sure of an audience. Ring in a hot shot for a shooting demonstration. Have a couple of pros shoot a few ends for a modest cash prize. Get your game protector on his feet for a few paragraphs. Have Miss Shapely model some new hunting attire. Show no more than one good film. Do any or all of these, or come up with something better to get people out. A few door prizes will help to bring and hold the crowd if you have the drawing at the end. (Some $200 in door prizes was given at the Easton Clinic.)

Then, give them the real meat of the program.

There is much more to shooting the bow than meets the eye. In fact, some of the more important facets of performance can't even be seen. But there are obvious tests which can prove certain unseen intricacies of action and interaction of the bow and arrow. For example, shooting an unfletched arrow at close range to determine compatability with the bow setup. Illustrating the difference in stored energy

ARROWHEAD COLLECTION ASSEMBLED by F. "Rit" Heller, who took the top archery buck in Game Commission's 1973 scoring program, interested many at the seminar.





DGP DICK FAGAN, of Lehigh County, discusses the safety problems which occasionally occur while bow hunting, the archery season, shooting hours, and related subjects.

in any given bow at various draw distances on a bow weigher. And many more.

Practically everyone has a general knowledge of how a bow and arrow perform. It is only when someone knowledgeable gets into the real guts of the subject that the need for more than passing information about archery creates excitement and a real desire to know more.

There is a danger in getting so technical that much is lost. But how many are aware of the need to tune a hunting bow? To any serious hunter this should be elementary information. It is to any successful target archer. An entire seminar could be devoted to this one subject. Yet how many of your acquaintances would understand the question let alone the multiplicity of answers?

How much better it would be for bow hunters if they *could* tune their bows. Instead of practicing to overcome the deficiencies in their tackle so that they can hit *something*, they could bette utilize their potential ability with tackl that fit them and their needs.

Archery seminars are probably bes held away from the local club ground unless they are easily accessible to th main urban area. Although the Easto seminar was forced indoors by weathe it started in the band shell mad available by community officials. Th suggestion here would be to hold th *first* one in a central location.

There are two good reasons for this The first is obvious. It is easier to get crowd together in town than to coax i over many times intricate and dust roads to the nearest field range and clu house. Routes to ranges are notoriousl poorly marked even though a ma could be provided for the occasion. Th less obvious reason was mentione earlier. Those attending don't feel trap ped into something if they are in mor familiar surroundings. Just get then together; you might later get then singly.

Get Community Involved

Not every town has a band shell Some have YMCA's. Almost all hav high school gymnasiums. Some servic clubs have space for such an event. Ge the community involved. More peopl will ask questions, get curious.

If you want people to know wha archery is all about, show 'em. Tell 'em Get 'em together. Let them know tha here is an activity that deserves its plac alongside other participating sports.

Get your pro shops and sportin goods dealers involved. They'll love yo for it. Some of them might also lear something and start being more se lective in the tackle they offer and th services they provide to archers.

Go public and your private archer activities will profit. Above all, you wil be providing a service that Pennsyl vania needs as the top target and bow hunting state in the nation.

Easton did it and others are doing it.

A Scope In Time Saves Nine

by Don Lewis

Photos by Helen Lewis

IT'S STRANGE how articles and columns are born. Sometimes it's just a remote incident that sparks a future story. This happened to me one evening when I entered a gun store to buy a set of scope mounts. Big game season was close at hand, and the store was packed with customers. A slightly heated discussion near a display case full of scopes caught my attention. Two fellows with quite an age difference were arguing about scopes, and the older hunter was trying to convince his young adversary to buy a scope.

"When I came back from the military in '46, all I wanted was to get to a gun store and buy a new deer rifle. In fact, I was giving this a lot of thought when the draft took me away for three years and stuck me deep in the South Pacific. The months I spent island-hopping carrying a 9-pound M1 brought me to the solid conclusion that I'd buy a new lightweight deer rifle with my severance pay. I dreamed of a new bolt action with a full buckhorn rear sight. That's exactly what I got, and I laughed out loud when the store owner suggested a scope."

"Wait a minute, Joe," cut in the younger man. "You can tell us all your past experiences and frustrations, but the fact remains you didn't get a scope until many years later. If the rifle scope is so great, why'd you wait so long?"

"Just let me finish. After the war, scopes weren't too common, and I had been taught that only open sights guaranteed success and that the scope was just a fad. I wouldn't budge when the shop owner pointed out a scope's advantages, but I paid dearly for it over the next fifteen years when nine nice bucks just stood and looked at me after I shot."



IN CASE ANYONE wonders about Lewis's right to discuss the value of scopes, this view of some of his rifles should indicate he's had the experience to back up his observations.

"Yeah, I know all about the standing shots you missed, but the fact that nine got away doesn't prove I should buy a scope. A scope wouldn't have guaranteed you nine dead deer, and I still think that where I hunt peep sights are better."

"You couldn't have said it any better, Davie. Those were the exact words I said about the buckhorn, and I really believed using an optical aid was unethical."

"You still haven't explained why the scope would have produced more deer over the years, and don't try to cloud



TACK-DRIVING accuracy of Remington 40XB-BR 222 justifies use of M3200 Redfield target scope for chuck hunting. With it, placing a bullet is like a draftsman placing a dot on graph paper.

the issue with your homespun philosophy about stuff like being ethical. Just tell me how the scope would have made a difference."

"I'm glad you asked that question again," Joe said smiling. "You've seen me cut a two-inch group at 100 yards with my 270 and a five-inch group at 200. I never did that with open sights, and the nine bucks I missed were under 200 yards and I had a solid rest each time. It wasn't the gun or me; it was the sights. When I lowered the binoculars, the deer seem to back off another 100 yards, and with the buckhorn sights I couldn't tell when I had a good sight picture."

"Okay, so the scope may have given a bright picture similar to the binoculars, but what makes you think success is automatic with the scope? You're still only speculating on that."

"Maybe so. All I've got to go on is that from the first season I used the scope till now, I've made four shots on standing deer without a miss. I'm not saying a scope would have assured nine more deer, but getting back to a little more of my homespun philosophy, may I remind you of an old adage that goes something like 'a scope in time saves nine.' "

Everybody laughed pretty hard at the way the veteran hunter paraphrased the old saying, but it won his point. The youngster finally admitted he was following some strict advice given by his grandfather. He gave in and I felt he was relieved. I think he wanted to lose the argument, but didn't know how, and he seemed very proud when he paid a healthy deposit on a high quality variable.

When I began writing, scopes were not generally accepted by the majority of Pennsylvania's big game hunters. Even after World War II, scopes were purchased with an "I'll give one a try" attitude, and those hunters favored a quick detachable type mount such as the Echo, Griffin & Howe's double lever, and Bausch & Lomb's creation of a mount setup with windage and elevation adjustments built in the base. Pachmayr offered the low swing version that flipped the scope to one side.

From a gunsmith's point of view and the fact that I've shot hundreds of rifle-scope combinations, I make no bones about favoring a low, solid mount. On my own rifles, I mount the scope as securely as possible using Loc-Tite on all base screws and tightening all ring screws to the maximum; I also lean heavily toward the windage adjustable type such as Redfield and Buchler that permits aligning the scope to a near center and then fining in to point of im-



pact with the scope's metering adjustments. Three or four companies make this general design.

I don't want to put down the hunter who goes for a flip, swing or detachable mount setup, but after more than 20 years of shooting I'll take my chances with the scope that is on a solid mount. I can't forget the terrific surge of pressure generated in a rifle, and a scope held in place by clips, springs or pressure-exerting devices is susceptible to failure.

Don't Flip

After sighting in one rifle that was equipped with a flip type mount, I advised the owner not to move the scope unless absolutely necessary. He was chagrined, since the idea of flipping it back and forth appealed to him. I explained that doing this might change the point of impact a few inches, but he was not convinced. To my surprise, he flipped the scope about five times and gave me the rifle to shoot. To make a long story short, point of impact had changed seven inches to the left.

I don't want to imply that this would happen with every detachable setup, but I do think the possibility exists. On a variety of occasions, I've had quick detachable mounts come loose or separate from the base, and it would be unlikely the hunter would detect this while hunting. The detachable mount is not as strong as a solid mount, and my advice is to keep a sharp eye open for signs of loosening.

The thrust of the column is leveled more at picking the proper scope and mount, plus paying some attention to the reticle design. A stroll through any sports shop will confirm that plenty of scopes are available in various designs, powers and reticles. The prospective buyer should have no trouble choosing, but the over-abundance could create indecision. I get dozens of requests each year seeking advice on this very subject.



TOM LEETE finds customized M43 Winchester 218 Bee with Weaver J4 scope just the ticket for squirrels high in the hardwoods of Potter County's mountains. Most of the time this power scope is suitable, but occasionally higher magnification helps.

The paramount question concerns power, usually with a desire for as much as possible. This is not the ultimate answer.

Which brand name to buy is the second most popular question. I have always said that a scope should be a lifetime investment. For this reason, I have always advocated the high quality scope that carries a higher price tag. Here again my reasons are based on the fact that the scope is usually American made or has a reptutable American company backing it. Waiting six to nine months for a scope to be repaired doesn't appeal to me.

The truth is that most scopes—even some of the inexpensive imported ones—are fairly well made. This isn't a blanket statement that all scopes are of equal quality, but common pitfalls such as fogging or reticle enlargement in

variables have been practically eliminated. Notice I said *most* scopes were fairly well made, for, to me, this is the crux of the matter. It all boils down to one word—construction. This not only covers the strength and durability of the scope but the quality of components used.

Poor construction along with some optical deficiencies stimulated the belief among yesteryear's hunters that a scope was not dependable. To this very day, some still believe this and fear any slight bump or fall will knock a scope out of alignment. I've even seen homemade devices to protect scopes, including a miniature wire cage that constantly got tangled in every passing limb. This is not necessary; a scope will stand the average bumps and jars of ordinary hunting.

Getting back to power brings us to the main concern of the new scope buyer. This is a field of uncertainty for most purchasers, and the common mistake is to get as much as possible. Without realizing that excessive power requires a drastic reduction in field of view and further complicates matters with mirage, the new buyer many times goes for a straight 6X when a 2-1/2X or 4X would have been the proper choice.

Wrong Scope

I met a hunter in deer season carrying a fixed 8X because he wanted a clear target. I was using a 1-1/2-5X variable set at 3X, since the longest shot possible was under 125 yards. This hunter had unwittingly bought himself four or five extra powers he didn't need. In one sense of the word, he was worse off with the 8X than open sights in that terrain: his scope was primarily designed for target and varmint hunting and carried a very thin set of crosswires that were extremely difficult to see. No, power alone is not the answer.

My belief is that the prospective buyer should consider what is to be expected from the scope. I won't sugge using a scope to determine what target is. This is a job for binoculars. *do* use my scope to determine whether deer is legal, but never to determine the object being watched is game. often feel we expect too much from certain cartridge, for instance, or fro some model of scope.

I stress the compactness of the bi game scope, and my conclusions ar based on simple facts. First, why carr extra weight or bulk if hunting method require a lot of movement? Even th extra quarter-pound of most 3-9 Variables over a 2-7X or a 1-1/2-5 makes a significant difference on a ful day's hunt. In heavy brush and rougl terrain, the extra power and bulk of th larger variables are not helpful.

Several years back, I used a Redfiel 4-12X on a Ruger No. 1 Single sho chambered for Remington's 7mm Magnum. My full intent was to change the scope after bench shooting the rifle but I failed to do this. My hunt was suc cessful, for the 12X setting clearly showed a 10-point rack, and I droppe the trotting buck at over 225 yards. have never felt that my successful hun was due to inadvertantly cranking the scope to its highest power, and I think the results would have been much the same if I would have followed my original intentions to install a Weave 2-1/2-7X.

I'm impressed with the "plex" reticle as I'll call it. Its design has coarse crosswires tapering or thinning at the center or intersection. I feel this is a sig· nificant contribution for the big game hunter and does not rule out the varmint hunter, who needs the thin wires for smaller targets. Each scope maker calls his version by a different name, but the basic design is exactly as I have described it.

At first, I thought the "plex" reticle design was of little use on the lowe power scopes until I realized the squir rel or short-range chuck hunter could



RUGER M77 rifle, topped with 3x Lyman scope, is typical of the kind of outfit Lewis recommends for deer and bear hunting in Pennsylvania. In calibers such as 284 or 308, it has plenty of power for these species, and a hunting scope of this general design and magnification is dependable and easy to use under all conditions.

tilize this setup very nicely. In fact, ıe fixed 4X with the plex reticle makes n ideal combination on either the avage 24 over-under rifle/shotgun ombination or Ithaca's rifle/shotgun utfit. With a Weaver one-inch tip-off ıount, the standard hunting scope can e used on any 22 rifle with a grooved eceiver.

One thing for sure, there's no hortage of scope/mount combinations oday. The see-through mount is aining in popularity, and the ones I ested gave good results. My only ob-ection is the height of the scope above he rifle; it could be a good bit sychological, but to me the see-hrough mount gives the rifle a top-eavy look. The hunter determined to tick with iron sights may find this new reation exactly what he's looking for.

I have tried to tell the big game unter to stick with solid mounts and ompact scopes of either variable or xed powers. If possible, use one of the djustable mount setups for rough eroing and save the scope's metering adjustments for the fine tuning. Also, don't allow power to be the prime factor, unless the scope will eventually be used on a varmint rifle. As I stated earlier, there is no "all around" scope. The simple fact is that some sacrifice must be made if the scope is to be used on different type outfits.

The rifle scope is here to stay, and rightfully so. A high quality scope complemented by an adjustable mount enhances any big game or varmint rifle. It also will pay back over the years an inital investment that may seem high. This type of sighting device removes a great amount of guesswork and allows the shooter to use every ounce of skill he possesses. Some time in the past I made the statement that you can't shoot any better than you can see. Any scope will increase a target's brightness and clarity, but the hunter should consider other factors suggested here to aid in his selection. If the right scope is bought this season, it's very possible that ten years from now you'll be able to say that "a scope in time saved nine."

In The Wind

by chuck fergus
information writer

A recent government study shows that wild horses and wild burros are far from being vanishing breeds. A requirement of the Wild Free-Roaming Horse and Burro Act of 1971, the study says that substantially more wild horses and burros are living on public lands than before the act was passed.—*American Humane Association*

Proceedings of an oil shale symposium held in Colorado indicate that wildlife will lose if rich oil shale deposits in the West are developed. Many wildlife populations would be disturbed by mining and shale disposal, but a more serious problem might be the influx of thousands of people to staff the industry. This would further reduce habitat and pressure species such as falcons, grizzly bears and mountain lions.—*Wildlife Management Institute*

The National Wild Turkey Federation has announced formation of a state chapter of Pennsylvania members by the end of January, 1975. Over 1000 Pennsylvanians belong to the Federation, which has a national membership of over 4000. Goals of the nonprofit organization headquartered in Edgefield, S.C., are preservation and propagation of the wild turkey.

The spraying of almost half a million acres of Northwestern forest with DDT has killed "thousands, probably hundreds of thousands" of songbirds, according to "Audubon" magazine. Widespread damage to small mammals and other wildlife has also been reported. DDT has been banned because of its injurious effects on wildlife, but last summer the U.S. Forest Service won an emergency exception to the ban and was permitted to use DDT to combat an infestation of Douglas fir tussock moths—*National Audubon Society*

A recently-released Environmental Protection Agency public opinion survey shows that the fuel shortage did not diminish the American people's desire to eliminate pollution. The national survey followed up a similar 1973 sample that showed impatience with progress made in environmental protection and a willingness to pay for a better environment.—*National Wildlife Federation*

The U.S. Fish and Wildlife Service has recommended that the Department of the Interior ban the use of lead shot for waterfowl hunting in the Atlantic Flyway beginning with the 1976 hunting season; the Mississippi Flyway in 1977; and the Central and Pacific Flyways in 1978.—*National Shooting Sports Foundation*

Persons wishing to express opinions on issues to the Federal Government's executive, judicial or legislative branches can use Western Union's Mail-O-Gram system. For $2, Western Union will telegraph a 100-word message to Washington and mail it to the addressee. A toll-free telephone call to Western Union at (800) 257-2211 can be placed from anywhere in the U.S. Mail-O-Gram charges can be handled by mail or placed on telephone bills.

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Who-o-o's Happy About the New Year?
We Are, and We Want to Wish Each and Every Reader
All the Best for 1975, Too!

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COVER PAINTING BY TAYLOR OUGHTON

To many Pennsylvanians, the black bear represents the last vestige of true wilderness found in our state. Gone are the Indian, the woods buffalo, the mountain lion and the wolf—victims of civilization—but we still have the bruin. The species should be on the scene for many years. Back in 1923, a Pike County hunter took a bear that weighed an estimated 633 lbs., live-weight, which is the state record. (See next month's GAME NEWS for an article on this bear.) That was a big bear, considering the fact that mature male grizzly bears average about 500 lbs. It's doubtful that this record will ever be eclipsed in our state, but come fall, many hunters take to Penn's Woods to try for *their* trophy of a lifetime—a Pennsylvania black bear.

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EDITORIAL . . .

Why a Questionnaire?

I DON'T KNOW IF YOU, AS A reader, ever wonder about the people who put out GAME NEWS, but we wonder about you and in this issue we're asking some questions. Not because we're nosey, but because knowing more about you can help us serve you better.

GAME NEWS has always had several basic objectives. Its primary one is to explain to the hunter—the guy whose license money finances the Game Commission's operations—the various programs being carried out by Commission personnel. Whenever practicable, these programs are publicized in advance, so that interested persons may make their feelings known. Sometimes, as with the recent extension of the antlerless deer season in part of the state, it's impossible to do this. (Due to the lead time required to put out a magazine, on December 18 when that season was extended we were working on this, the February, issue.) However, the reasoning behind the extension appears in this month's Conservation News section, the earliest we could get it in, so that hunters will know what was involved in the decision. Besides explaining Commission activities, other GAME NEWS objectives include telling readers about laws or conservation movements which affect wildlife management in this state, and publishing articles which inform and stories which show people enjoying Pennsylvania's out-of-doors. The stories, incidentally, are often chosen because they too serve a teaching purpose, particularly for youngsters, when they portray hunters acting in a sportsmanlike manner.

We try to blanket the field, publishing material on all outdoor subjects except fishing and boating, which are covered by PENNSYLVANIA ANGLER. However, except for occasional letters from readers we have no way of knowing whether we are giving you the kind of stuff which interests you most, whether we have the most satisfactory "mix" of subjects, or whether through a mental lapse we are even missing some subjects altogether. So we decided to ask you. Thus, a questionnaire was prepared. Many experts in this field recommend asking only a few simple questions, distributing them to a restricted group, and making it as easy as possible to reply. We felt it was fairer to give each subscriber a chance to let his opinions be known. We also broke the rules by letting others—our wildlife biologists—throw in some questions after we'd asked the ones we wanted. Also, we had to make it necessary for persons replying to pay the postage on their responses. "Not the best approach," the experts said, but we told them GAME NEWS readers weren't "average-type-questionnaire-filler-outers." I suppose the number of replies will prove which of us is right.

Anyhow, the questionnaire appears on the next page. It's set up so the answers can be plugged into our data processing equipment. If we get some significant responses, we'll let you know what they are. So here's your chance to let us know what you like or don't like about GAME NEWS, what you want or don't want in the future. Get a pencil, turn the page and have at it.—*Bob Bell*

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Please Fill In or Check Appropriate Blanks

1. NUMBER, AGES AND SEX OF PERSONS WHO READ THIS COPY OF GAME NEWS

Under 12	12 — 16	17 — 40	41 — 65	Over 65
__M __F	__M __F	__M __F	__M __F	__M __F

2. DO YOU LIVE IN PENNSYLVANIA? Yes____ No____

Rural area____ Small town____ Suburb____ City____

3. DO YOU REGULARLY READ THE FOLLOWING GAME NEWS FEATURES?

	Yes	No		Yes	No
Editorial	____	____	Susan Pajak's column (Girls, Gun & Game)	____	____
Field Notes	____	____	Les Rountree's column (Camping)	____	____
Conservation News	____	____	Keith Schuyler's column (Archery)	____	____
Hunter Education	____	____	Don Lewis's column (Guns)	____	____

4. WOULD YOU LIKE MORE, LESS, OR ABOUT THE SAME ON THE FOLLOWING IN GAME NEWS?

	More	Less	Same		More	Less	Same
Wildlife management	____	____	____	Big game hunting	____	____	____
Habitat management	____	____	____	Small game hunting	____	____	____
Game Commission reports	____	____	____	Waterfowl hunting	____	____	____
Trapping	____	____	____	Varmint hunting	____	____	____
Dogs	____	____	____	Turkey hunting	____	____	____
Recreational vehicles	____	____	____	Ecology	____	____	____
Natural history	____	____	____	Fiction	____	____	____
How-to-do-it articles	____	____	____	Trophy photos	____	____	____
Photo stories	____	____	____				

5. HOW WOULD YOU FEEL ABOUT THE USE OF ADVERTISING IN GAME NEWS?

Favor____ Object to____ No opinion____

6. DO YOU HUNT IN PENNSYLVANIA? Yes____ No____ TRAP? Yes____ No____

7. HOW MANY PERSONS IN YOUR HOUSEHOLD HUNT IN PENNSYLVANIA?____ TRAP?____

8. HOW MANY PERSONS IN YOUR HOUSEHOLD HUNT LEGALLY IN PENNSYLVANIA WITHOUT A LICENSE?____

9. DO YOU HUNT THE FOLLOWING IN PENNSYLVANIA?

	Yes	No		Yes	No		Yes	No
Cottontail rabbits	____	____	Woodcock	____	____	Deer	____	____
Snowshoe rabbits	____	____	Quail	____	____	Bear	____	____
Squirrels	____	____	Turkeys	____	____	Crows	____	____
Ruffed grouse	____	____	Woodchucks	____	____	Ducks	____	____
Pheasants	____	____	Raccoons	____	____	Geese	____	____
Doves	____	____	Foxes	____	____			

10. APPROXIMATELY HOW MANY DAYS DO YOU HUNT IN PENNSYLVANIA ANNUALLY?____

11. APPROXIMATELY HOW MUCH MONEY DO YOU SPEND ANNUALLY ON HUNTING AND RELATED EXPENSES SUCH AS GUNS, AMMO, CLOTHING, GASOLINE FOR HUNTING TRIPS, ETC.?____

12. DO YOU USE PENNSYLVANIA STATE GAME LANDS FOR

	Yes	No		Yes	No
Hunting	____	____	Horseback Riding	____	____
Hiking	____	____	Birdwatching	____	____
Photography	____	____	Dog Training	____	____
Snowmobiling	____	____	Nature Study	____	____
Trapping	____	____			

13. EDUCATIONAL LEVEL COMPLETED

Grade School____ High School____ College____ Graduate School____



Social and Ethical Considerations in Conservation

To the Hunter

By Robert F. LeResche, Ph.D.
Alaska Department of Fish & Game

BY NOW IT is aphorism that the hunter is an endangered "species," and that social and ethical concerns of non-hunters are the basis for his precarious position. You, the hunter, have come to realize that despite the philosophical impossibility of debating "taste" or personal ethics, your actions are suddenly socially unacceptable. Your public image is low and declining, and you are worried and perplexed. Recent essays have explored anti-hunting sentiments and have clarified how others see hunters. Arguments against hunting have recurrent themes, but can be divided roughly into three categories: The "cruelty argument"; the "uncivilized argument"; and the "ecological argument." The first two can only be answered by personal opinion—for that is all they are themselves. There is some rational basis for the third. I feel it is very important that hunters take each of these seriously, however, for there are millions of people—people who vote and thereby control America's public land—who sincerely feel them. You have ridiculed and laughed them off too long.

The Cruelty Argument is straightforward—killing is cruel. Wild animals are happy and innocent until man comes on the scene with his roaring machines, traps, and big guns. The animals he kills suffer, their bereaved friends and



ALL HUNTERS SHOULD decide what their own personal ethics are regarding hunting and conservation, and then consciously stick to these ethics, whether in a crowd or alone in the wilderness.

relatives mourn their loss. Their offspring are left to starve. The answer, you say, is simple . . . . ridiculous! Don't put man's feelings onto animals. They have no emotions . . . . . But as one tries to develop this counter argument the real truth becomes plain—there is no proof of either side, and "their" ideas are as true to them as yours are to you.

The Uncivilized Argument is more insidious and a little less fair, for it attacks the hunter rather than the act of hunting itself. Hunters are culturally immature—throwbacks to the caves or at least to the dark ages. Or, worse yet, they are sexually inadequate, and their guns are merely extensions of Freud's cigar. In short, hunting is below contemporary human dignity and hunters are unfit for today's society.

Counter-arguments to this are many and fascinating. Man evolved a hunter, still retains the trait, and a healthy human personality accepts, rather than represses, its true nature. Hunting is a better outlet for man's inherent aggressiveness than is war. Or, simply a direct reversal—a natural human being can be defined as one who hunts.

The Ecological Argument maintains that hunting endangers the ecological balance, and may lead to extinctions. Look at the passenger pigeon, the bison, the great auk. Look at how many more moose and grizzlies one can see in McKinley Park than in other parts of Alaska, where hunting is allowed. Look how the walrus and seals and polar bear were almost extinct before we saved them with the Marine Mammals Protection Act. Lucky we forced the Fish and Game to close that doe deer hunt—they'd have killed off all the deer. They are all the same argument.

Rational but Misinformed

These criticisms sometimes are at least rational, though often based on misinformation. In some cases, they may even hold merit. We all know that since the advent of modern game management no species in North America has been severely depleted by legal sport hunting and many have benefitted tremendously. We also know that sport hunters have been the single strongest factor in preserving all kinds of wildlife and wild lands over the last few decades and in financing the work that has taught us what we know of wildlife ecology. But hunters must also admit that the advent of the aircraft, the ATV and the snowmachine, without a simultaneous development of a new ethic for their use, has endangered the ecological balance and made proper management and preservation a struggle, at best. You must admit that indiscriminate shooting, crippling losses and illegal or unreported kills and harassment of game by hunters probably have, in fact, decreased some populations and redistributed others.

You must realize that in today's world, arguments about the ecological necessity of hunting are absurd. To save hunting, hunters will have to admit these things and do something about them—fast.

There is a recurrent theme in all the anti-hunting arguments: The hunter is a slob. He thinks only of killing. He has no respect for the rights of other humans or other animals. Can you deny this categorically? Do you like all who call themselves "hunters"? I hope not.

Barbarism to Decadence?

It has been said that "America is the only nation that has gone from barbarism to decadence without creating a civilization in between." I wonder if that does not all-too-truly describe the development of our hunting culture in this country? The days of non-regulated market hunting may have merely faded into the days of mechanized, no sweat, kill 'em and take 'em home hunting, and it is hard to discern any culture or set of ethics that developed in between. I know it is there, somewhere, but it is difficult for a non-hunter to see. Stating a civilized set of ethics loud and clear—by deed much more than by words—is in my mind the only salvation for the sport of hunting. Psychologists tell us, "People don't like what they fear, and they fear what they do not understand." So what we are talking about, you say, is education. Maybe so, but what I'm not talking about is news releases saying "The National Wildlife Federation explained today that they have ethics and love animals." As one who has "explained" cow moose hunting before more than one town meeting, well I know that in the real world the quickest way to alienate someone is to give him a lucid, hard-hitting rational explanation he never asked for.

How do we educate people to believe in hunting, then? The best way I can summarize it is by educating them to believe in hunters. Let me list several specific suggestions.



PGC Photo by CIA Wes Bower

CHARLES BOYD, RD 3, Tyrone, is congratulated by his wife Shirley for bagging Blair Co. bear. Most women recognize the need for hunting when facts are explained logically.

First—Sit down alone with yourself sometime soon and decide, "What are my own personal ethics regarding hunting and conservation?" That question is more difficult to answer than you might think but the answer will come. Then—consciously stick to these ethics, whether in a crowd or in the wilderness 100 miles from the nearest human. How many of us have—just once—chased an animal with a snowmachine? Hazed one with an aircraft? Failed to kill cleanly and humanely? Left just a bit of edible meat in a field? Hunted a species we knew little about? Forgotten for a moment that hunting is much more than killing something and getting home fast? Ethics have a way of eroding very quickly at the tiniest breach.

Once you know your principles and

follow them yourself, talk about them. Don't ignore acts by other "hunters" that are wrong in your eyes. You can't make that fellow who just shot from the road share your ethics, but you can let him know you find his behavior offensive. Have an opinion; anti-hunters certainly do.

Second—Don't be defensive about hunting. Don't say "It isn't any worse than letting animals starve," or "The game can take it." Hunting is not merely the lesser of two evils. With the pride you have in your principles and in the fact you follow them without exception, and with the biological knowledge you have, you need not be ashamed of hunting. In fact, if you are ashamed of it, why do you do it in the first place?

There Are Some Slobs

As a corollary, never get into a position where you defend all hunting. Admit there are some slobs who hunt (there are also slobs who belong to anti-hunting groups), and make it plain you disapprove of them as much as anyone does. Many practices lumped in the public's mind under "sport hunting" are despicable.

Third—Accept the fact that anti-hunters are sincere, that many people are actually made ill by the sight or even the thought of a dead wild animal. They don't deserve to be written off as "kooks" any more than do hunters. So have some concern for the sensibilities of others. Take them seriously and try to understand them. Practically translated this means asking what do I gain by leaving a gut-pile in view of the road, by tying a bloody deer carcass on the hood of my car, by carrying an easy rider gun rack full of loaded firearms in plain view in my pickup? These acts are nothing less than gross disrespect for the sincere feelings of others.

Fourth—Acknowledge—personally and as a group—that there are other legitimate uses of wildlife than hunting, and support them where appropriate. Never forget that wildlife belongs to all the people, not just to hunters. Be as sure that viewing areas and study areas are established as you are sure that hunting is preserved. No one who really understands the natural world is against hunting, and the more chances we provide for people to learn about ecology the better off we'll all be. So support a suitable number of closed areas, walk-in areas, and parks, where other important uses might be severely degraded by hunting. (Don't, though, make the mistake of thinking hunting is always incompatible with non-consumptive uses. With proper management and seasonal zoning they are compatible in a vast majority of cases.)

Finally—Become a naturalist. Learn all you can about wildlife and ecology. I guarantee it will enhance the pleasure you get from hunting. It can do nothing but good for the average hunter's image when he can intelligently talk about "healthy ecosystems" instead of "more shootable game," and when he knows as much about the fantastic migrations of the Arctic Tern as he does about the relative merits of a lung shot and a shoulder shot.

Try some of these things and you may even respect hunting more yourself. You'll certainly earn the respect of non-hunters, and maybe even of an anti-hunter or two.

Dr. Robert LeResche is a wildlife biologist with the Alaska Department of Fish & Game. This is the first of two articles excerpted from a speech he gave at the annual meeting of the National Wildlife Federation in Denver, Colo.

WINTER BIRDING

By Ken Calnon

A SMALL FLOCK of tree sparrows nonchalantly lifted from the snow-covered ground as I approached them. Being unafraid, as tree sparrows usually are, they only flew a short distance before alighting.

Prior to my intrusion, these small visitors from the northland were busily feeding on the weed seeds exposed above the snow. Their tracks were the clue to their activity.

A constant, moving chatter caused me to look up as a flight of goldfinches passed. They were not in their well known brilliant yellow and stark black colors of summer, but bore their somber winter coats of olive and dark brown.

Then, from a nearby clump of alders, came a bird song that was totally out of place for this time of the year. I recognized the songster as a catbird, but could not quite believe my ears. Scanning the alders with binoculars, my disbelief was quickly erased as the catbird came into full view. During wintertime, all respectable catbirds should be enjoying the warm sunshine in the land of Dixie. But not this one.

By now I am sure that you know what I was doing that winter day—*birding!*

Birding is one of the most rewarding ways to spend your more inactive days of winter. The many different species you will encounter are ample to make each venture to forest and field a worthwhile and rewarding experience.

The following paragraphs describe eight species of birds that you will be able to observe and identify without difficulty.

Song Sparrow

Generally speaking, the song sparrow is a small brown bird, not often found far from brush, hedgerows or thickets. Closer scrutiny, however, will reveal different gradations of brown.

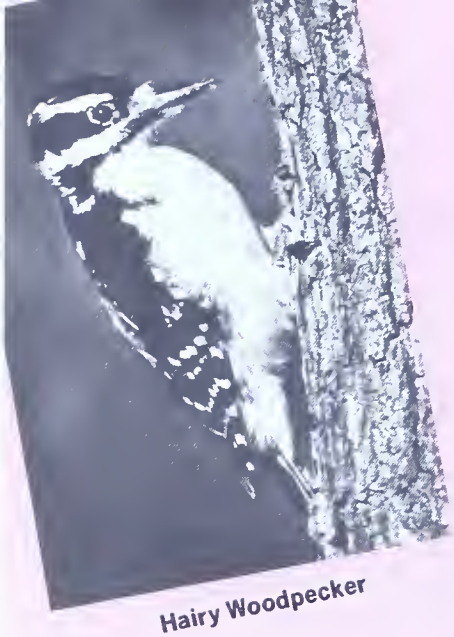
The important identifying field marks of the song sparrow are its dark streaked breast and a dark central breast spot, which are both brown. The upper parts are usually a medium brown streaked with darker brown. The tail, long and slightly rounded at the tip, is pumped up and down as the bird flies.

Song sparrows are hearty birds and remain quite active during winter even when the temperature approaches zero.

White-Throated Sparrow

The well defined white throat of this sparrow makes it quite easy to identify. The white-throat is slightly larger than the song sparrow and marked quite differently. The two bright yellow lores are prominent on adult birds during late winter and spring. A horizontal line passing through the eyes divides the head into upper and lower parts. The upper portion is striped with black and white. The lower part is gray, as is the breast. The belly and under tail coverts are white. Upper parts are brown streaked with two definite white wing bars on each wing.

White-throated sparrows prefer dense cover where they feed in flocks of five to 25 birds, scratching noisily among the leaves for fallen seeds.



Hairy Woodpecker



Downy Woodpecker



White-Breasted Nuthatch



Song Sparrow



Tufted Titmouse



White-Throated Sparrow

Tree Sparrow

The energetic tree sparrow makes its appearance in flocks in "brushy" fringe areas or weedy fields. The latter habitat is preferred.

Several good field marks identify the tree sparrow. First, it has a central spot of black on a gray breast. Second, it is the largest of the rusty-capped sparrows. Third, the bill is bi-colored, the upper mandible being dark, the lower mandible bright yellow. As does the white-throated sparrow, the tree sparrow also has two white wing bars on each wing, and its upper parts are streaked with brown.

Tree sparrows are scrappy little creatures, and they often "square" off with other birds for choice spots at the feeders.

Slate-Colored Junco

Without doubt the little juncos, often called snowbirds, are favorites of many folks. Juncos, often traveling in large flocks, usually arrive in our area during October and November. They are some of our earliest migrants from the north.

Juncos are abundant gray-colored sparrows that frequent weedy fields and the perimeters of brushy areas, feeding mainly on seeds.

The predominant color of adult males is a deep slate gray on its upper parts, chin, throat and breast. Feathers of the belly and undertail are white. The center tail feathers are gray, while the outer feathers, easily seen as the bird flies away, are white.

Female and immature birds are a brownish-gray, not nearly as dark as the male birds. All juncos have pink bills.

Downy Woodpecker

Woodlands and small town backyards would not be the same without the friendly little downy woodpecker. Fortunately, they are fairly abundant and remain with us throughout the year.

The downy's plumage consists of two colors: black and white. The underparts are completely white. However, the upper parts are a mixture of black and white. The top of the head is black. A white stripe completely encircles the head between the crown and the eye on the female. On the male, the white stripe is broken by a patch of brilliant scarlet. The red patch marks the distinction between sexes. On the back, a rectangular patch of white feathers is very predominant. The wings and tail are primarily black with the former having several neat rows of elongated white spots. The tail has white outer feathers spotted with black.

Hairy Woodpecker

In plumage the hairy woodpecker differs only slightly from its cousin, the downy. This difference lies in the white outer tail feathers which are barred with black in the downy, but unbarred in the hairy. This is only a minor distinction.

The major difference is the hairy's size, which is much greater than that of the downy. The hairy is approximately two inches longer overall. Also, the hairy's bill is heavier and longer than its cousin's.

The habitats of these two birds overlap somewhat, but the hairy seems to prefer the deeper forest areas while the downy is more of a fringe area dweller.

White-Breasted Nuthatch

This bird, as its name depicts, sports a white breast. It is probably best known for its unusual habit of feeding on insects as it calmly walks down a tree trunk headfirst. When it stops it holds its head straight out from the tree trunk, which gives the bird an L-shaped silhouette.

The underparts and the sides of the head are white. In adult males, black is prominent from the base of the bill over the top of the head, including the nape. In females this area is gray. A lustrous tint of blue-gray adorns the back of mature males. Females lack the bluishness, and are gray. Wing primaries and secondaries are marked with gray and black. The tail is gray and the outer features are edged with white.

White-breasted nuthatches feed on a variety of insect eggs, larvae and adults.

Tufted Titmouse

The tufted titmouse is abundant, and it is found in woodlands, forest margins and even in small towns.

Its bill and forehead are rich black. Blue-gray adorns the crest, upperparts and the tail. The underparts, except the flanks which are rufous, are a warm white. Titmice are friendly birds and often will allow you to approach quite close to them.



"A Good Day in Berks County"

By Don Page

FOUR A.M. found the three of us—Jack Reese, Rudy Wagenknecht and myself—in an all-night diner near Bethel, full of the sort of happy anticipation that only a deer hunter on opening day can understand. It had rained most of the night, with the temperature just above freezing, and although the rain had stopped now, the morning was damp and raw.

When we finished our sausage and eggs we left the diner and Route 22, heading down a dark farm road toward Jerry Seiler's place, three or four miles away. From a distance the frame farmhouse looked completely dark, although a single bare bulb burned above the barn door at the end of the lane. We pulled into the driveway alongside the house and were just getting out of the car when Jerry emerged from the side door, buttoning his coat against the cold.

"From the looks of that darkened house, I'd say you fixed your own breakfast this morning," Jack Reese observed.

"These modern women," grinned Jerry, "are reluctant to fix a man a meal at this time of day."

Jerry and Jack had been roommates back in their undergraduate days at Penn State. Jack went on to medical school and now practices in Ambler, while Jerry, who had been an ag major, now teaches agriculture and manual arts at a large rural high school about twelve miles away. Jerry had purchased the farm eight or ten years ago, not too many years after he had finished his education. He leases all the tillable land, almost 200 acres of it, to a neighboring farmer, and although he holds a master's degree in ag education, he limits his own farming to the family garden. His property is the last cultivated land up against Blue Mountain, with only dense woods and the mountain to the north of him. Wooded strips of land extend from the base of the mountain, like giant fingers, into the cultivated areas, providing excellent game cover. Both ringnecks and rabbits are usually plentiful and we've bagged the odd turkey on occasion. Jack and I know the area well, and even Rudy, who is from Europe, had hunted it once, on the last day of small game season just two days before.

"I've changed my mind about going up on top," Jerry said a bit sheepishly. "I think Ill stick around here this morning and check out the edges of the upper fields."

"Aw, come on, Jerry," Jack urged. "I thought we had this all figured out last night." He was referring to the long session we'd had the night before, when we had mapped out our strategy around Jerry's kitchen table while Polly, Jerry's wife, filled us with hot coffee and homemade oatmeal cookies. At that time we had figured our chances would be best if we climbed to the top of the mountain well before daybreak and positioned ourselves at various locations along the south edge of the crest. Then, so we hoped, when the shooting began down in the valley and along the base, some deer would head up over the top and into the thick brush beyond. We had hunted the area often and knew most of the game trails well.

Had This Feeling

"I know," said Jerry, "but you three don't need me up there the way you plan to hunt today, and I've had this feeling about those upper fields ever since I got up this morning."

"He must have seen something up there recently and thinks it's got his name on it," Jack said to me with a grin.

"I think you're making a mistake, Jerry, good hunches or not," I com-

mented, as we all climbed into Jerry's pickup. "But if you want to chase them up to us, it's all right by me."

The little truck made its way with some difficulty up the muddy lane along the edge of the field. When we reached the northern end, Jerry brought the truck to a stop just inside the woods.

I slung my Mauser-actioned 30-06 across my shoulder and groped in the big pockets of my hunting jacket for the little flashlight I'd brought along.

A Bit Obligated

"We've got about an hour and a half," Jack said as he tried to read his watch in the darkness. "That'll give us just enough time to get up on top and get located."

The three of us bid Jerry good luck and started off through the darkness along the narrow trail leading up a small draw, and eventually to the top where it joins the old Appalachian Trail. I was hoping we'd have good luck, particularly because of Rudy. Rudy Wagenknecht is a friend and business associate from Germany and a really dedicated outdoorsman. I had done so much bragging about Pennsylvania hunting that he managed to time a business trip to coincide with the hunting season. One of my more difficult-to-substantiate claims had been that there were over a half million deer in Pennsylvania, most of which just conveniently hung around State Game Lands hoping to be seen. Now I was beginning to feel a bit obligated to show him a few, and I began to wonder what the day really held in store for us.

The climb up the mountain was tough in the darkness, but in 50 or 60 minutes we reached the top and the Appalachian Trail. The skyline was just becoming visible enough to enable Rudy to get his bearings. He fired up his pipe, a curved, Austrian-looking thing that I suspect was hand-carved by real elves, while Jack smoked a cigarette. Then we wished each other luck and split up. Rudy headed to the western side of the draw up along the top and Jack followed the main trail and the mountaintop, moving northeast.

I left the trail and made my way east, down just a bit over the crest on the south side to a spot I'd found two years before. There, someone had thoughtfully pushed a log up against the base of a large old oak, making a comfortable seat. In the semi-darkness I settled down to wait for daylight and the opening of the season. The heat of the climb began to dissipate, and once again I was aware of the cold. I buttoned by hunting jacket snugly to my neck.

I knew from previous years that I had a view down the mountainside to the south of up to 150 yards in places, and a somewhat more restricted view to the east. There was a large patch of laurel just to the southwest, and the view in that direction was poor. Above me were tall trees with little underbrush and I could see almost a hundred yards in places toward the top of the mountain, and the view directly west was just as good. A gentle breeze was blowing from the south, a perfect situation. Far off in the distance, I could hear some heavy trucks making their way along Route 22, and, closer at hand, a squirrel began to fuss about in the dark grayness of early morning.

One of the delights of this kind of hunting is that it gives you the opportunity to simply sit in the midst of nature as God intended it and think about it. My thoughts wondered back to the hunting I had done in Arizona and New Mexico as a kid. We didn't do any trail watching then, but were constantly on the move. As I sat and studied the gray and leafless forest, I recalled an event which I had witnessed while on a hunt during my early teens. I had been idly watching a group of three does about 150 yards away, when to my surprise a shot rang out and one of the animals staggered and went down. She struggled up and two more shots were fired while I

shouted frantically, "That's a doe, a doe!" The animal went down a second time and I stood there astonished. The character who had fired the shots, a lean, unshaven fellow, appeared on the other side of the small canyon. He made his way toward the downed animal and I also approached cautiously, for some reason gripping my old 30-40 Krag as if my own life were somehow in danger. When only fifty yards away I yelled, "That's a doe, you shot a doe!" He looked at me, startled by my presence. Then he glanced down at the dead animal and quickly disappeared into the juniper and piñon pine, leaving me standing there feeling a little sick and wondering what to do with the dead deer.

As a kid I had often thought about that experience, wondering why the doe had been killed. I concluded the shooter thought he had seen antlers and decided that was a mistake I'd never make. Since that time I have always waited to see both the antlers and the vital shoulder area at the same time before I squeezed the trigger—a habit which cost me a fine deer at this very location the previous year, although I never really regretted it.

It was late afternoon and I had been sitting at this same spot watching seven does wander in from across the top of the hill, one getting to within 20 yards of me before catching the breeze and moving off. A single deer followed about three minutes later and when it first came into view I was positive I saw antlers. It moved cautiously through the long shadows of the trees toward me, but looking through the branches I could see only parts of the animal. I began to wonder if I had really seen those antlers, after all. Twice its shoulder was clearly exposed, but not the head, and I held my fire. Then the deer stopped, still in the shadows, behind a patch of laurel only 75 yards away, exposing just a bit of the head and the rump.

I opened the bolt so my rifle couldn't



JERRY DROVE US to the top of his lane in his pickup, then the three of us shouldered our guns and started along the narrow trail leading up a small draw.

fire and carefully put the scope on the animal's head. That was no branch over his head, those were antlers and a good rack at that! I got ready to shoot, knowing that if he moved at all, that shoulder would again be exposed.

He did move and a shot cracked through the woods, but from about a hundred yards to my left. I watched through the scope in astonishment as the animal went down.

I slipped the safety on and stood up to see a big bear of a fellow moving cautiously toward the spot where the deer had dropped, but keeping a careful eye on me as well. I gave him a "thumbs-up" signal and he answered with a grin. He was carry-

ing a lever-action 35 Remington that was at least as old as he was, and he obviously knew how to use it. The deer had been shot neatly through the shoulder, a very clean kill.

"Why didn't *you* shoot him," the big fellow asked, his Pennsylvania Dutch accent identifying him as an area resident. "I've been watching both you and this buck for a good while."

"I had just satisfied myself that he really did have horns when you nailed him," I explained a bit sheepishly.

And horns he had—8 magnificent points' worth!

Well, that was last year, and here I sit in the same spot, I thought. Maybe I'll see another big one.

Power to Spare

The gray morning was dawning and I checked my watch. "Three minutes and the season's on," I mused, watching the minute hand tick away the remaining time. Then I reached into my jacket pocket and pulled out three of the 180-gr. handloads I had made up earlier. They were mild loads, as for some reason my Mauser shoots its best groups with 180-gr. Hornady spire points loaded somewhat lighter than factory made. But with an '06 there's power to spare on deer and the handloads were more than adequate for any shooting I would do today. I shoved them down into the magazine and then cranked one into the chamber, checking to see that the safety was on.

The season was open and still everything was quiet. Then a shot echoed off in the distance, a mile or two away. Five more minutes ticked away, and then there were two, followed by three shots down near the base of the mountain.

That should bring them up if they're coming, I thought, as I peered down through the gray trees with keener interest. But another five minutes passed and all was quiet. Then a squirrel began to chatter a bit from a tree off to the east of me, and a single shot echoed through the hills from far down in the valley below. A few minutes later I heard a bit of a clatter coming from a rocky area below and just a bit to the right. Then five does, moving in no great hurry, made their way up the mountain. They passed to the left of me and disappeared, heading toward the heavy stuff on the top, in the direction Jack had gone. The mountain was brighter now, and visibility was getting good even though the day was overcast.

Then a single deer appeared just to the right of where I had first spotted the does, moving out from the thick patch of laurel and stopping just at the edge of it, 100, maybe 125 yards away. Small antlers showed up clearly from where he stood, and I slipped the safety off, putting the scope on his head for a better look.

Three points and hardly a trophy, I thought. Well, I wanted to prove to Rudy there are deer here, and there stands proof. I'll take him.

Just then something or someone below spooked the buck, and he bolted. Moving east in great leaps along the mountainside, he offered no sensible shot. But then he turned toward the top, approaching me almost headon and in high gear. I picked out an open spot just ahead of him and no sooner had it in the scope's field of view than he burst into it. I touched the trigger and the Mauser rocked back sharply against my shoulder. The deer spun around and dropped from sight below me.

Good gosh! Could I miss from 60 yards, I wondered, not really believing I had. I worked a fresh cartridge into the chamber and cautiously started down the hill.

I had moved only a few yards when I spotted the animal wedged between two large boulders. It had been shot through the heart. Although the antlers were anything but impressive, I was pleased with the size of the animal.

I struggled to get it up to a clear-

ing just above the rocks and quickly field-dressed it. Congratulating myself for having the foresight to bring a short length of nylon rope, I fashioned a makeshift harness, using a limb from a deadfall for a yoke-like handle. I then began the task of dragging the animal off the side of the mountain.

Although Blue Mountain isn't much of a hill by Western standards, dragging that deer off the side of it was real work, and an hour later I was happy to be approaching the spot where we had parked the pickup.

But it wasn't there. Jerry must have got to thinking about that pot of hot coffee Pauline would be brewing by now and has gone back to the house, I thought. Well, do I drag it the half mile or so remaining, or do I sit here and wait? The rumble of the pickup answered my question, and Jerry drove into sight wearing a very broad grin.

"So somebody else had a little luck, too," he called.

"You son-of-a-gun!" I yelled. "What does yours look like?"

"Well," he said, looking down at my 3-pointer, "neither one of us will make Boone and Crockett this year!"

We lifted my deer into the bed of the truck and started for the house. Jerry recounted how he had seen his along the edge of a field just a few minutes after the season opened and had killed it with a single shot from a distance of about 125 yards. He's a southpaw and hunts deer with a Remington "Gamemaster" in 308 Winchester.

His deer was hanging from a limb of an old sycamore in the yard, and we hoisted mine up alongside. Both were fat animals, and when I remarked on the size, Jerry said with a grin, "They should be fat, they've been gorging themselves on my corn for the past three months." Both young whitetails were as big as I had seen for their age, and they couldn't have been fatter had they been pen-fed. For the venison enthusiast, we had a couple of gourmet's delights.

By then it was a little after 10, and I took advantage of the occasion to wash up and shed a few of the heavier clothes I was wearing. Pauline had a new pot of coffee brewing, and after a couple of cups and some of her homemade biscuits, Jerry and I decided we would head back up to the top just to see what was going on.

We took the truck up through the Boy Scout camp just to the east of Jerry's property and then hiked the well-maintained trail to the top. Moving quickly without rifles and the usual gear, we reached the top and



A SHOT ECHOED through the hills and a few minutes later five does made their way up the mountainside. They passed me and disappeared, heading toward the heavy stuff on top of the ridge.

started down the Appalachian Trail to the west. We had gone only a few hundred yards when we rounded a bend and bumped smack into Jack, struggling to drag a 5-pointer down the trail.

"Well, would you look at that!" I said to Jerry. "Ol' Reese finally lucked out!"

Jack looked up with a grin, sweat running down his face. "Just look at this beauty! And what do you mean 'luck'? This took skill, man, real skill!"

"Well, I guess we might as well sit down and hear him out." Jerry said to me as he fished out a ciragette. "Who knows what sort of story he's going to tell us."

"Hold on just a minute, what are you two doing up here without rifles, anyway?"

"Well," said Jerry, feigning a yawn, "shall we tell him now, or shall we wait until he gets his wild tale off his chest?"

"Now just a minute," Jack said again, "you mean you guys got something better than 5 points?"

"Well, we got a little better than 5 points, all right," Jerry said, rubbing his chin, "but it took two deer to do it."

"So we've taken *three* deer!" Jack exclaimed, shaking his head with a grin. "That makes quite a morning!"

Jack's Story

Jack went on to tell how he got his, and indeed it was a story. He had located an old tree-stand during the previous year, in a large pine that looks out above the thick and almost impenetrable laurel and scrub oak growing on the top of the mountain. He had managed to find the stand in the early morning darkness and had climbed the tree. However, after sitting there an hour or so, he decided the view was not so good and he moved to a second tree on a steep hillside about 300 yards away. That tree had a large, bare limb about 10 feet above the ground that looked to be a promising place to sit. He was just about to pull himself up when he spotted a bunch of deer moving up over the crest of the mountain and into the brush just below him. He counted nine of them. Two were bucks.

The deer stopped only 45 or 50 yards away, and Jack, crouched awkwardly beneath the tree, wondered what to do. His rifle was slung over his left shoulder, and he gradually eased it off. But due to both the location of the deer and his strained position, there was no way he could get the rifle up to his right shoulder to get in a shot. So he eased the little Remington 660 carbine to his left shoulder, and, picking out the buck with the largest rack, squeezed off a shot.

"You mean to tell us that you shot that deer left-handed while hanging onto that sidehill by your toes?" I demanded, looking over at Jerry to see if he was prepared to accept such a tale.

"That's right, and I've got the bruise to prove it."

Jack had been so intent on lining up his crosshairs on the deer's shoulder from his awkward stance that he had neglected to hold the 308 firmly against his shoulder, and when the little Remington went off, it walloped both him and the deer. It had dropped almost in its tracks, and there was no doubt but that it was a well-placed shot.

We took turns dragging the deer down the trail and through the Boy Scout camp to the truck, eventually hanging it alongside the other two.

The third deer brought Pauline out of the house, hardly able to believe that each of us had brought in a buck. It was quite a change from some of our hunts she had witnessed.

After a late lunch I decided to go back once again to the top and see if I could locate Rudy, but after two hours of unsuccessful looking, I returned to the house. Pauline telephoned a small meat packing plant in Meyerstown and learned that they would be open until 9 p.m. to accommodate hunters. We decided to

wait for Rudy's return before taking our deer there.

It was almost dark when we saw Rudy's lean frame trudging along the edge of the field toward the house. We went out to meet him.

"There *are* over a half million deer in Pennsylvania," he said with a tired grin, "but they're all does!"

"Well, we know of three of them that aren't," Jack said.

Rudys face brightened. "Did you have some luck?"

"Yeah, they're hanging from that old sycamore alongside the house."

"That's great," Rudy said. He admired the deer with genuine interest. "They're big enough, but those racks wouldn't take any prizes in Germany," he grinned.

Once again we loaded the deer into the truck, and Jerry drove it to Meyerstown. Rudy and I followed in the car. A young lad of about 12 was checking in the deer at the packing house, his dad no doubt out trying to get a buck of his own. There were 40 or 50 deer in the coldroom. We admired some of the more interesting racks, then told the boy how we wanted our venison prepared. He took down the instructions, and then advised that they would allow us a couple of bucks for the hides, if we didn't have any use for them. I agreed, and then he asked, "How about the antlers? Do you want us to save the antlers?"

"No," I advised, "you can just throw them away."

"What?" said Rudy in amazement. "You mean you're not going to keep those antlers?"

"What on earth would I do with a tiny little 3-pointed rack like that?" I asked.

"You ought to nail it above your reloading bench, that's what you ought to do with it."

"Why?" I asked

"Because this was a great day, and every time you look up at those horns they will remind you of it, that's why," Rudy said with complete seriousness.

I thought about that for a moment. This day had begun for us 16 hours earlier, and yet it seemed too soon for it to end. Certainly it had been a great day.

"Hey, young fellow," I said. "Save that rack for me, will you?"

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A Hootin' Night At Hidden Valley

By George H. Harrison

SOME OF THE best times spent at our cabin in the woods were during the dead of winter. From a wildlife standpoint, this time of the year can be very exciting. One memorable weekend in early February particularly sticks in my mind.

With snow piled high outside and the fire roaring inside, I found myself in a mellow mood. At about 10 o'clock, just before going to bed, my father-in-law and I went for our nightly walk to the bench. As we stepped from the porch of the cabin, the thermometer read zero. "This could be one of the coldest nights of the winter," I said.

"Good night for owls," answered Pete. .

"Yeah, it's clear and it's February," I noted as we walked along the moonlit trail to the bench.

The bench has been our destination every night at Hidden Valley for the past twelve years. It is just an old park bench, but it overlooks some of the most beautiful wooded countryside in all of Pennsylvania. And a full moon turns it all on.

Pete and I both consider ourselves outdoorsmen. We can find something of interest in the outdoors any month of the year, any time of the day or night. Pete's seventy years of observing nature have always been a great source of knowledge and enjoyment for me.

Making our way up the hill, the night's silence was broken by the crunch we made with each step in the crusty snow. A slight breeze touched our faces as we reached the top. By now my mustache was frosty from my breath. It was cold!

Settling onto the bench, Pete stuffed a little Mail Pouch into his cheek and mused contentedly. Helen preferred that he not chew around her, so the walk to the bench had more than one purpose.

We hadn't been there more than a few minutes when a barred owl up the hollow let out its dog-like call, *Hoohoo-hoohoo . . .hoohoo-hoohooaw.*

Pete responded automatically with his own "Hoohoo-hoohoo . . . hoohooaw," and the owl answered. I've heard this same exchange many times during our years of bench sitting and it is amazing how much that barred owl sounds like Pete!

The trading of calls back and forth was just reaching a frenzy when a second owl got into the act. This one was a great horned owl. Deeper and more resonant than the barred, the great horned gives out three, five, or six uninflected hoots. *Hoo, hoo, hoo, hoo, hoo,* echoed from the ridge above the barred owl's hollow.

So we had two owls, but that wasn't the end of it.

Almost on cue, a screech owl joined in the chorus with his mournful whinny or wail, running down the scale. Some screech owls do it all on a single pitch,

When The Red Gods Smiled



Screech Owl



Saw-Whet Owl

but this guy moved from high to low. And now we had three (plus Pete who was really getting warmed up by this time).

Our final entrant in the Hidden Valley Owl Choir was the most distinguished of all. His appearance on the moonlit stage just about brought down the house . . . well, at least Pete and I were overwhelmed. The *too-too-too-too,* in a bell-like mellow whistle, was the first saw-whet I had ever heard. Good thing Pete was there to identify it, because I had never heard anything like that before, and I thought I knew my bird songs.

. . . and then we had four (plus Pete).

This was truly a red letter night for us. Imagine four different species of owls, all singing at the same time on that unforgettable night in February.

In spite of the zero temperature, the calling of those owls was a sure sign of spring. All four were singing either to a mate or defending a territory. At least one of them, the great horned, was already nesting.

Strangely, the four owls we had singing that night all sang a different pitch. The baritone barred owl, the bass great horned owl, the alto screech, and the saw-whet—who was a definite soprano.

Owls are to the night what hawks are to the daylight hours. Where the hawk leaves off, the owl begins. Together the two families of birds present a 24-hour-a-day vigil against many of man's enemies, particularly mice and rats.

The barred is a large owl, nearly the size of the great horned, our largest owl, and much larger than the other two members of the chorus. It is distinguished by its big round tuftless face and mild disposition. Barred owls are rarely heard in cities, preferring deep deciduous forests like those found in northern Huntingdon County where it is common.

The barred often nests in a hollow tree, but will sometimes use the



Barred Owl

abandoned nest of a hawk or crow. In the Everglades, interestingly, they have been found nesting on the ground. Two to four pure white eggs are laid and in three to four weeks the young are hatched blind. They remain in the nest for well over a month.

The barred, though a large owl, limits itself to rather small prey such as frogs and lizards, with mice being the major source of food.

Owls swallow their prey whole, disgorging the indigestible portions in the form of a pellet. These pellets can be used as positive evidence of what the owl has eaten from the analysis of the bones and fur or feathers. Many a maligned owl has been vindicated when his pellets or castings were examined by a wildlife biologist.

Our bass singer, the great horned, is the most powerful and aggressive of all the owls. It will attack and eat most any living thing, except the large mammals. It will even eat skunks and house cats.

The earliest of all the owls to nest, it is not unusual to find a great horned covered with snow, sitting on its nest, incubating eggs. They, too, often use abandoned nests of hawks and crows. The two to three white eggs take 28 days to hatch. During the two months the young remain in the nest, the adults are vicious protectors. I recall watching my dad climb a tree containing the nest of a great horned owl in Butler County. The adults nearly took his head off before Dad made a hasty retreat.

No Longer a Bounty

Happily, Pennsylvania no longer pays a bounty on the great horned owl. This controversial program was terminated in 1965. The blanket head-hunting on all great horned owls was not in the best interest of a sound wildlife management program.

Our third songster, the screech owl, doesn't screech at all. It emits a wavering, eerie, ghostly sound that carries for long distances and causes superstitious people some anxious moments. There are those who believe that if a screech owl lands on a house, someone inside will soon die.

It certainly does land on houses. It is the only owl that is commonly found in the city. As a boy, I recall hearing a screech owl call outside my bedroom window in Tarentum.

The screech owl is the smallest owl with "horns." These horns, or tufts, are not its ears, as many believe, but merely ornaments. Their real ears are openings under their head feathers.

One of the most distinguishing features of the screech owl is the fact that they come in two colors—red and gray. There is no satisfactory explanation for the color phases. They mate with no regard for color and the colors of the youngsters are as mixed and unpredictable as their parents'.

The screech owl is guilty of killing a large number of songbirds as well as mice, insects, crayfish, spiders and

reptiles. Cornell University researchers discovered that the screech owl is very important to the balance of the songbird population. One researcher figured that if a single pair of robins was permitted to breed without control, they and their offspring would increase to over 15,000 birds in five years.

Preferring a nesting cavity, the screech owl will also nest in a manmade nesting box about the size built for squirrels and sparrow hawks. They lay their four to five white eggs in March and care for the owlets in the nest until they are about a month old.

Smallest of all our Pennsylvania owls, the saw-whet rounds out the chorus with its high-pitched call. It gets its name from one of its sounds, which is like the sharpening of a saw blade.

It may also be the tamest of all the owls, and can be touched or picked up while roosting. Because of this unusual trust in man, it has often become a victim.

It, too, nests in a cavity, such as an old woodpecker hole.

The bird is so small that it is often preyed upon by larger owls. One incident recounts that the band of a saw-whet was found in the regurgitated pellet of a long-eared owl, only two days after the saw-whet had been banded.



Great Horned Owl

Hearing four different kinds of owls sing at the same time isn't like bagging a 12-point buck or making a double on grouse, but it sure turned Pete and me on. We have never since gone to the bench that we didn't recall our experience . . . and hope that it would happen again.

True Blue (North) American

The most beautiful of American waterfowl, the wood duck, is not an import from some exotic country of the East, as some believe. The woodie has always been a true resident of North America.

Bear Legal History

In 1905, Pennsylvania became the first state to protect black bears, and six years later the use of steel traps for taking bruins was prohibited.

Scorpio Arising

Scorpions are immune to their own poison, so they cannot commit suicide if cornered, as was once believed.



THE FIELDS WERE STILL FROSTY when the sharp bark of my black hound signaled the first rabbit of the season. I hurried to an opening where I thought it would cross and waited.

Not Really Goodbye

By John Bell

AS I BEST remember, it was a typical autumn day in the Allegheny Plateau. The leaves were crispy underfoot and I could smell the faint tinge of woodsmoke filtering through the pines. Jack Frost had worked overtime that particular night, and the fields were still a little frosty around the edges. But the early morning sun was doing its job and as I stopped to reflect a moment upon past years' hunting seasons, I thought that it promised to be a good day.

My speculations were interrupted by the sharp, intermittent bark of my black hound as he moved in pursuit of his first rabbit of the season. I hurried to an opening ahead where I thought the rabbit would cross and hadn't been there more than a minute when Mr. Cottontail scuttled through the trees on my right. I swung my Browning Double Auto and my first bunny of the season was bagged in style.

The report had barely died when that little black hound rustled through the leaves to greet me. He inspected first the rabbit and then the now silent autoloader. Waiting impatiently while I cleaned the rabbit, he gave the impression of an overzealous football fan; first up, then down, but all the while with "disciplined concentration." I stuffed the bunny into the back of my shell vest and motioned to my hound that now was the proper time to resume the hunt. He responded with a woof as I told him, "Hunt 'em out!"

That first day had been as I'd expected. The next three chases were largely the same. I bagged my limit before 11:30 and started to make my way home, the little black hound following faithfully at my heels. I always had a difficult time explaining to him that we were allowed only four rabbits a day, and he was always reluctant

to leave the pines. I don't believe he ever really understood that command through his twelve years of hunting with me.

I often think of that little black hound, now that he's gone. A strange relationship exists between a man and his hunting dog, not unlike that between brothers. Perhaps my affiliations with dogs are a bit more strange than others, because my hunting dog shares not only the field but our household as well. You see, I'm not talking about the kind of dog that one usually associates with hunting, but rather a very special breed . . . household pet, hunting dog, watchdog and, ultimately, friend. A dachshund is all of these and more.

The dachshund (German for "badger dog") originally was bred in Germany and used to drive badgers from their holes. Dogs of the breed are valued as pets. They are brave and of good disposition. Ranging in weight from 14 to 22 pounds, dachshunds are black or tan in color, with a hound-like head. Long-haired dachshunds have been bred by crossing the short-haired varieties with spaniels or terriers. Dachshunds make ideal household pets since they don't have a disagreeable odor, shed little hair, and get along well with children. Some have proposed that the dachshund is the most intelligent of the canine kingdom and when handled with love and gentle care, is the easiest to train.

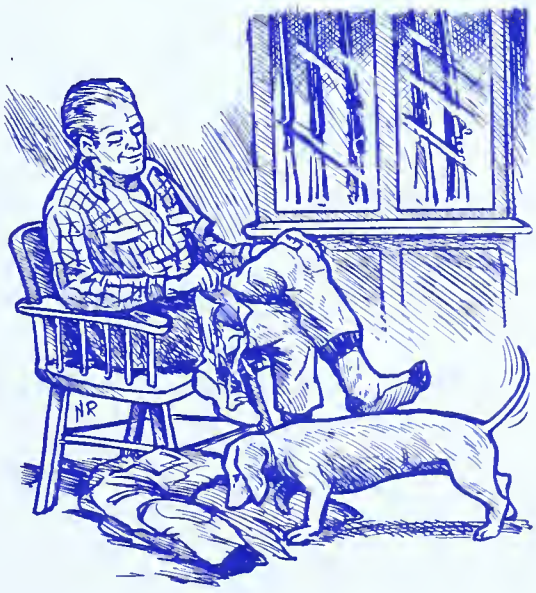
My father had hunted with both dachshunds and beagles for many years before I was born. A respected sportsman—in addition to being one of the most talked-about marksmen in the community—he never failed to bring home game when hunting with either breed or both. I was young when he gave me my first dachshund. Probably meant to be more of a pet than anything else for a lad of seven, that dog became one of the best rabbit hounds we ever had. I called him Schnopps, but as the years sped by he acquired various names. We all finally settled on Snops as his official title. Well, boys grow up into hunters and so do dogs, and of all the experiences we shared, the most memorable are those of the field.

Like most dogs, Snops had his own way of doing things. He would investigate every brushpile, every nook and cranny where an elusive bunny might seek refuge. His short legs were an asset in exploring places that many beagles would have to pass by. And his efforts were often rewarded. It wasn't unusual to see a rabbit making a hurried exit from one end of a hollow log as Snops sniffed his way into the other. The dog's exit was always the more dramatic, for he came out yelping and running as fast as his little bow-legs would carry him.

I guess that's one pleasure of hunting with a dachshund. Because of their short legs, they don't run the rabbit too fast. This has two distinct advantages: first, the rabbit isn't prone to hole up, and secondly, it gives the hunter plenty of time to head the rabbit off. It's a leisurely pace, hunting with a dachshund . . . you're not all tuckered out at the end of the day, and there's always time to stop momentarily and reminisce about days gone by. Any dog man, I'm sure, will know what I mean.

Well, old Snops is gone now; he died at age twelve. He was partly crippled

I HAVE ANOTHER dachshund now, a red one this time, and his name is Duffy. He's the most "curious" of them all. He knows no fear and I'm as proud of him as any man of his beagle.



due to a slipped disc, but he hunted until the day he died. I stayed up with him most of that night and held him in my arms until he finally passed away. I thought toward the end that my little black hound might pull through, as he seemed to gain strength, but he must have been saving his energy for the long journey ahead of him . . . the third heart attack claimed his life. I buried him the following morning at that place he loved most. It seemed appropriate, and I laid him to rest wrapped in his favorite blanket at the corner of the pines where the morning sun first spreads its warmth.

I have another dachshund now, a red one this time and his name is Duffy. Excuse me, Halyday's Duffy (he's very sensitive about his name in print). He's in keeping with the dachshund tradition, although I think he's the most "curious" of them all. He knows no fear and now that we've hunted through two seasons, I'm as proud of him as any man of his beagle.

When the season approaches, I grease my boots and check my shotgun, and the dog senses my anticipation. He cocks his head and looks at me as if to say, "Well, what's the delay?" I hunt with a Browning side-by-side now and with a little red hound, but nothing has really changed. As I pass old Snops on the way to the pines, which are much larger these days, I can still smell the wood smoke, feel the frost, hear my heart beat . . . .

Books in Brief . . .

(Order from publisher, not from Game Commission)

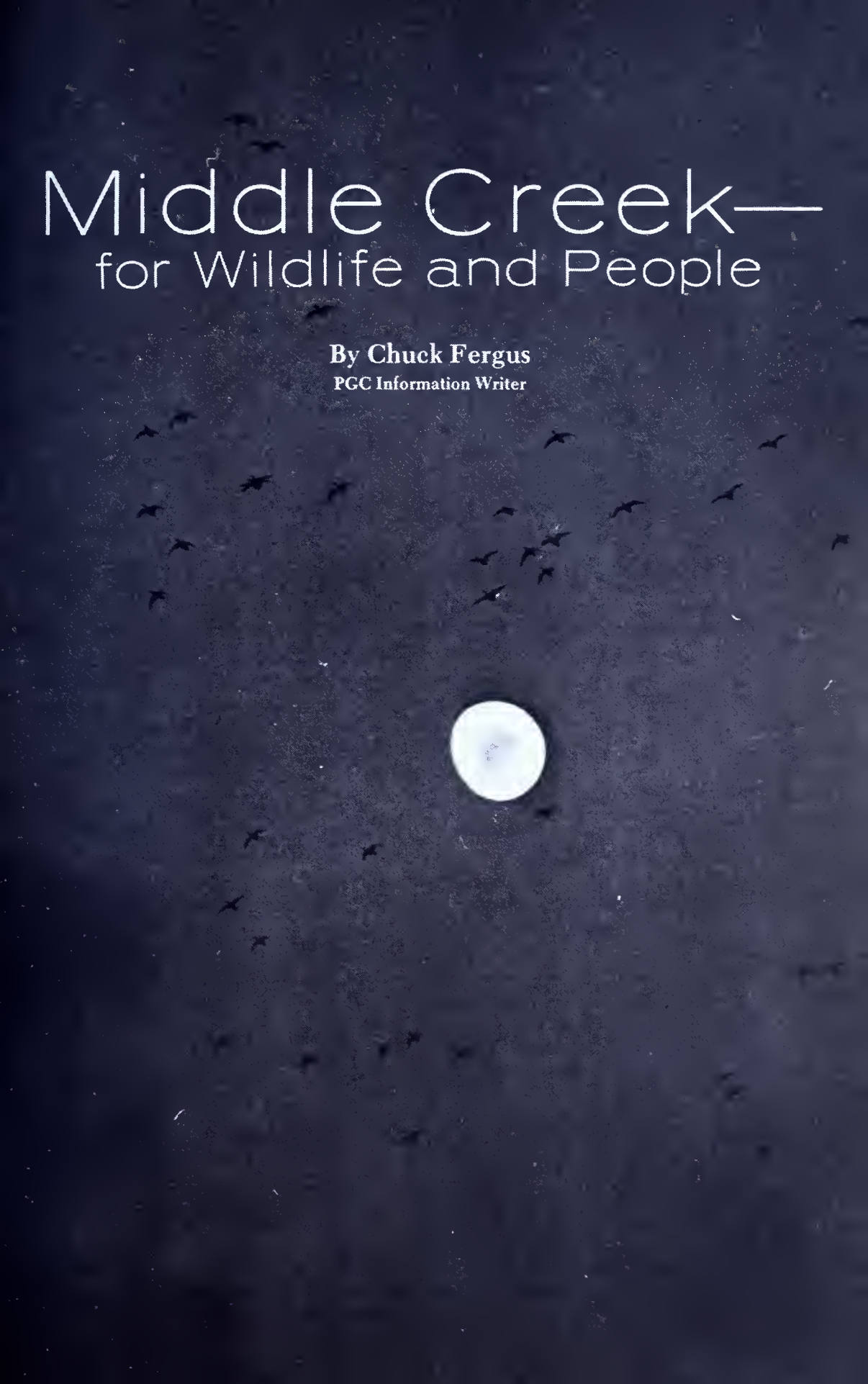
Sheep and Sheep Hunting, by Jack O'Connor, Winchester Press, 460 Park Ave., New York City 10022, 308 pp., $10. O'Connor is America's best-known sheep hunter. He's hunted these magnificent animals since 1934 and written about his experiences almost that long. Nevertheless, the vast majority of this book is new material and anyone who has dreamed of climbing into this continent's most beautiful regions in pursuit of its greatest trophies—Bighorn, Dall, Stone and Desert rams—will find it fascinating. The basic natural history of each species is here, along with suggestions on how to hunt them, a discussion of the territory each inhabits, plus advice on equipment, rifles, trophy judging, etc., all tied together with personal incidents gleaned from forty seasons in sheep country.

Decoys of the Atlantic Flyway, by George Ross Starr, Jr., M.D., Winchester Press, 308 pp., large format, $17.95. Dr. Starr began collecting decoys in 1948 and now has one of the largest private collections in the world—more than 1500. His interest in collecting grew out of hunting and in turn led to writing, this book being his most recent effort on this subject. It is divided into three parts, "Decoy Art and History," which dates from the market-hunting era to the present; "Stick-Up Decoys," which covers nonfloating imitations; and "Regional Decoys," a geographical-historical survey that deals with decoys from Maine to North Carolina. More than 350 decoys, many in full color, are shown in George Dow's photos.

Speer Reloading Manual Number Nine, Speer, Inc., Lewiston, Idaho, 464 pp., $4.75. The first Speer manual came out in 1954. It had 134 pages and was an immediate success with the comparatively few shooters of those days who rolled their own ammo. Now, with millions of riflemen and handgunners indulging in this activity, it takes a good size book to list the loading data for Speer's extensive bullet line. Both rifle and handgun loads are covered, in calibers from 17 through 45, and there's good coverage of related reference material.

Middle Creek—
for Wildlife and People

By Chuck Fergus
PGC Information Writer



CHARLIE STROUPHAR maneuvered the small boat between snags that stuck out of the brown water. A dozen Canada geese flew overhead, their broad wings pumping steadily, honking at the boat that intruded on their domain.

"Probably two pairs and their young," Charlie said, nodding toward the big birds. Charlie is Resident Manager of the Pennsylvania Game Commission's Middle Creek Wildlife Management Area, and he was showing me the 400-acre waterfowl impoundment.

Ahead of us an old gander tried to take off, but his once-powerful wings would not lift him out of the water. Too old to fly, the goose dodged through the dead timber, swimming low and fast, breaking a small wake behind him. Charlie explained that the old honker was an original resident goose stocked in the late 1960s, when Middle Creek was under development.

We circled the round nesting island in the middle of the impoundment, with Charlie pulling up the outboard motor to get us through shallow spots. Black ducks and mallards rose from the water at our approach and flashed toward the eastern end of the lake.

Finally we pulled into a quiet, grass-rimmed inlet where electric-blue dragonflies skittered over the water. We lifted the boat ashore; my tour had ended. But before we drove away, I took one last look out over the water, where noisy gaggles of geese circled and the ducks flew with that wild, effortless grace seen in all waterfowl. At that moment, I found it hard to believe that just ten years earlier this area was little more than marshy bottomland and a meandering stream.

The Middle Creek story begins in 1963, when Pennsylvania voters approved a $70 million bond issue—called Project 70—to buy lands for public recreation. The Game Commission received $5 million and decided to use part of this allocation to develop a waterfowl management area in southeastern Pennsylvania, making goose and duck hunting more readily available to sportsmen in this heavily-populated area. PGC field officers were instructed to look for suitable land.

They found it in the marshy land around a stream called Middle Creek.

Back in 1929, the Game Commission had bought State Game Land 46, 1758-acre tract of wooded hills above Middle Creek on the Lancaster-Lebanon county border, southeast of the city of Lebanon. For years, the land was managed for small game. Although ducks and geese flew over during the spring and fall migrations, the birds rarely stopped because the land was not suitable for feeding or resting. The farm land just north of the original SGL 46, on the other hand, seemed to have potential.

The same marshy ground, the sluggish creek and the high water table that made this land marginal for agriculture also gave it excellent wetland habitat qualities. With this in mind, the Game Commission began contacting landowners and buying land.

Funds from sources in addition to Project 70 were used at Middle Creek. Project 500—also a bond issue—provided $2.6 million for planning and development, and the Federal Bureau of Outdoor Recreation provided over a million dollars to help construct the dam, road and other facilities. (See September, 1972, GAME NEWS article, "A Look at Middle Creek," by Donald Zimmerman.)

Because much of the land and development were paid for with tax money, the Game Commission realized that the area should serve all citizens, and not just hunters. The Commission therefore provided picnic areas, hiking and nature trails, an interpretive area at the Visitors Center and places to fish and boat.

Today, just over ten years after the

initial Project 70 money was allocated for the area, development of Middle Creek is complete. A successful waterfowl hunting season has closed, with many Pennsylvania sportsmen taking ducks and Canada geese on the controlled shooting area. Thousands of others have benefitted from Middle Creek: school children, fishermen, birdwatchers, picnickers, hikers and many more.

charlie strouphar

Charlie Strouphar is well-suited to the job of Resident Manager at Middle Creek. His hometown is Fredericksburg in rural Lebanon County, and farming, hunting and trapping have always been parts of his life.

Charlie directs Food & Cover Corps operations, traps to control predators, sets up duck nesting boxes, checks hunters in and out of the area, does farm work and a myriad of other tasks. But perhaps his most important job is meeting the public, a job at which he excels. When waterfowl management, hunting, trapping or Middle Creek are the subjects, Charlie speaks with authority . . . . and a good Pennsylvania Dutch accent. He likes to joke, "Once I couldn't say Norse or Souse, but now I can say boase."

He's familiar with the project from its beginning, having come to the area as a construction foreman in 1966 when Game Commission personnel began removing buildings, fencerows and woodlots and constructing dams and dikes. Later, he was promoted to Waterfowl Management Assistant, his title today.

I've seen Charlie talk to college forestry students, school children and Pennsylvania Game Commission employes. He stresses the role hunting has played in conservation and explains how wildlife is a renewable resource that must be managed.

Charlie tells about a local birdwatcher who was shocked to learn that Middle Creek would be opened to



CHARLIE STROUPHAR talks with two young ladies who have come to see the Middle Creek area. Visitors Center, in background, features waterfowl display.

hunting. Since that time, however, she has sat in on films and presentations to school children at the Visitors Center. She has seen how hunters' license monies pay for maintenance of Middle Creek and habitat restoration that benefits all types of wildlife, including non-game birds. Now she buys a hunting license to support Middle Creek and other Game Commission programs, even though she doesn't hunt.

the land

I'm basically a lover of land where people are few and far between, and I remember feeling a little disappointed in Middle Creek when I first visited the area last September. I guess I was just trying to evaluate the land from a wilderness standpoint, and that doesn't work.

The land of Middle Creek is not really wild. I saw roads, cemeteries, the silver silos of farms and a small village north of the Management Area; I heard



THE NUCLEUS OF Middle Creek's resident Canada goose population was 30 mated pairs transplanted from the Pymatuning Waterfowl Area in 1967.

dogs barking, someone hammering nails, cars, trucks and farm machinery. But when I saw my bias and adjusted to it, I realized how beautiful the land is. The view from the hill above the Visitors Center is of rolling, wooded ridges, lush grasslands and cultivated fields framing the 400-acre lake behind Middle Creek's dam. Anyway, maybe a little of that "lost" wild quality is present in one sound heard throughout Middle Creek: the honking of the Canada geese that have claimed the land.

Geese are more land-based than ducks, which breed in Middle Creek's inlets, ponds and potholes. The honkers select nest sites that permit wide fields of view, and they feed and graze in open expanses that predominate on the Management Area.

I tried to get close to a flock of at least a hundred geese feeding in a close-cropped, grassy field near the Visitors Center. No way. A large honker kept an eye on me as I circled the flock and put a small clump of pines between me and the birds. When I started angling toward them, the big one let out a long string of honks. The geese ran a few steps, watched me and took to the air when I didn't stop walking. Standing there, looking at their lumbering takeoffs, I could see how tough it would be for a predator to get close enough to grab one.

The geese circled, formed a ragged vee, and then flew off toward the lake. The lake has flooded several acres of woodland and even though the trees left standing are dead, they provide excellent protection and nesting sites for many bird species. Several nesting islands built for geese dot the impoundment. Old rubber tires are fastened onto tree stumps about a yard above water level—geese nest in these man-made structures each year.

On the hills that form the Management Area's southern border grow maples, tall oaks and dogwoods. Gray squirrels thrive where food strips meet trees—an early fall hike shows that squirrels have dragged ears of corn into the woods, splitting each kernel and eating the germ at its base. What the squirrels leave, deer will clean up.

The land has been transformed from marshland to wildlife management area. As anyone who has visited Middle Creek will tell you, it is a good transformation.

the wildlife

Tied to the land, and varying as the face of the land changes, is wildlife. At Middle Creek several different natural areas exist, inhabited by different birds and animals. When hiking the Conservation Trail, a mile loop through the woods near the Visitors Center, I saw jays, cedar waxwings, robins, flickers, a red-bellied woodpecker, a red-headed woodpecker, song sparrows and a black-throated blue warbler, one of the most beautiful of our state's birds.

Birds of prey hunt Middle Creek's open fields. When Charlie and I were driving on the area, we spotted a hawk in a field. The bird took to the air, and Charlie brought up his binoculars and checked it.

"An immature red-tail. He's got a mouse."

Other birds I've seen at Middle Creek include black-crowned night herons (they nest in the dead timber on the lake), great blue and green herons, marsh, sparrow and rough-legged hawks, coots, common gallinules, killdeer, sandpipers, warblers and what seems like armies of pheasants. These species don't even begin to scratch the surface of the tremendous number of birds that live at Middle Creek or stop there during migration.

Although not so numerous as the avian species, many animals inhabit Middle Creek. Trappers take some: the raccoons, skunks, opossums, red and gray foxes that prey on waterfowl or raid nests, and the muskrats that live in ponds. Rabbits can be found in brushy areas, squirrels and deer in the wooded hills.

Many wildlife species benefit from land management at Middle Creek, but ducks and geese have been helped the most. Management of the area is, of course, geared mainly toward producing and attracting waterfowl.

Mallards, wood ducks, blacks, blue-winged teal, shovelers and hooded mergansers nest on the Management Area, many in artificial nest boxes. One nest often used by mallards is made of straw sandwiched between two pieces of chicken wire and rolled into a cylinder. The nest is placed well away from shore on a stake about a foot above the water.

Three types of artificial wood duck nests are used, including metal cylinders with conical roofs, wooden boxes and nests cut and shaped from old tires. According to Charlie, woodie nesting was down last year in the boxes, reflecting an over-all drop in the number of wood ducks at Middle Creek. As of mid-November an estimated 10,000 ducks were on the area, migrants and residents, with mallards and black ducks the most numerous.

The nucleus of Middle Creek's resident Canada goose population was 30 mated pairs transplanted from the Game Commission's Pymatuning waterfowl area in 1967. These geese, along with a few nuisance geese and others bought from licensed propagators, were tagged, banded and wing-clipped. They were kept in holding pens on the area until the summer of 1969; then they were released, in a free-flying state, over the entire Management Area. Today, the resident flock has grown to more than 2000 geese. The lake, readily available food and ample resting areas annually attract many migrants, too.

Waterfowl will be hunted each year at Middle Creek, and a number of ducks and geese will be taken by hunters. But the benefits which waterfowl species receive from Middle Creek—a place to propagate, feed, rest and loaf, in a congested area, in a time of decreasing habitat—will far outweigh the harvest of a few individuals by hunting.

MIDDLE CREEK will provide goose hunting similar to Pymatuning's for sportsmen in the eastern part of the state. In 1974, the first season, 1228 geese were bagged, for a 59% success ratio.





Photo by Leonard Lee Rue, III

NOT ONLY HUNTERS enjoy Middle Creek. During most of the year, far more nonhunters—birdwatchers, hikers, photographers and others who like to see wildlife such as this snowy egret—visit this area.

hunting

The last day of October, 1974, was a shooting day at Middle Creek. I was sitting in the office at the Visitors Center with Charlie Strouphar.

"I haven't heard much shooting this morning," I said, looking out the window at the thick fog that lay over the Management Area.

"The fog keeps most of the geese on the lake," Charlie said, "and they haven't gotten out to feed yet."

The lake and surrounding land form a propagation area, where hunting or entering is prohibited. Beyond this area, which is bounded by a strand of wire and signs, are the controlled shooting area and the blinds. The blinds are built in standing corn strips by the Game Commission, and on each shooting day (Tuesdays, Thursdays and Saturdays) they are occupied by hunters eager to bag a Canada goose and ducks, if in season. This day only geese were legal targets.

I glanced at the clock on the wall. It read 8:40.

Five minutes later, four hunters parked their car in the lot and strode into the Visitors Center. Each had a Canada goose in his hand and a smile on his face.

"You fellows are the first hunters to report in," Charlie said, weighing the geese. "I'm surprised you got shooting with the fog this thick."

"I guess we were lucky," said one of the hunters. "We got the birds out of two small flocks. We took three from the second bunch when it was coming in to land with the decoys."

Charlie checked the tips of the birds' tailfeathers, showing me the rounded tip of an adult and the pronounced v-tip of a juvenile. He noted this in a book and gave the geese back to the hunters.

The four hunters were Paul F. Diehm, his sons Dale and Paul R., and his grandson Tim, all of Lititz. "We heard a lot of ducks and geese flying," the senior Mr. Diehm said. "This was the first time we've hunted waterfowl, and I'd say we made out pretty well."

In 1974, 6346 hunters applied for blinds at Middle Creek. In order to control the waterfowl harvest, only 600 could be chosen. Each successful applicant was allowed to bring three guest hunters to share a blind (occasionally there were less than four men to a blind; never more), and each hunter was permitted to take one goose on the area. At season's end, 1228 geese had been bagged, for a 59 percent success ratio.

Some sections of SGL 46 are open to public hunting in season. The controlled shooting area was opened for most of the 1974 antlered deer season and all of antlerless season, and it remained open for extended small game season. The propagation area, of course, remained closed.

recreation

The number of people who hunt at Middle Creek is dwarfed by those who come to the Management Area for recreation. Last year, an estimated

75,000 people took advantage of Middle Creek's peaceful and beautiful setting to fish, take pictures, hike, look at birds and animals, study exhibits at the Visitors Center, picnic or just relax.

The Middle Creek Wildlife Management Area is about one mile south of Kleinfeltersville in Lebanon County. To get to the area from the Pennsylvania Turnpike, take the Reading-Lancaster Exchange (Exit 21), then follow Route 222 north about a mile to Route 897, and turn left to Kleinfeltersville. A sign at the west end of town gives directions to Middle Creek.

Those coming to the area for the first time should be sure to stop at the Visitors Center. As well as serving as a hunter registration office, this building has a small auditorium, a large window which overlooks the lake, a scale model of Middle Creek and an interpretive area. The interpretive area features displays on natural history, ecology, wildlife management and mounted waterfowl specimens. The Visitors Center is open from March 1 to November 30, Wednesday through Saturday, from 10 a.m. to 5 p.m., and Sunday from 1-5 p.m. It will be closed on selected holidays.

Free maps of Middle Creek, also available at the Visitors Center, identify points of interest and the hiking trails that run through the area. A Conservation Trail near the Visitors Center shows different tree species and habitat management practices; many different birds can be spotted on this walkway. The Willow Point Trail is a half-mile stroll over flat terrain to a vista overlooking the lake, and it affords easy waterfowl observation. The Millstone Trail leads to a hilltop view and an old millstone quarry. Five other trails, including a segment of the Horse-Shoe Trail, crisscross the Management Area.

Fishermen can try their luck on bass, pickerel and panfish in the southern end of Middle Creek's lake. Signs mark areas where fishing is allowed. Several picnic areas ring the lake, where people can rest and eat while watching waterfowl. Large trees tower over the tables at the White Oak Picnic Area, and the Game Commission has restored a section of picturesque stake and rider fence here.

the future

If waterfowl habitat continues to shrink—and there's no reason to think it won't—the value of a place like Middle Creek will grow tremendously. The area will produce native geese and ducks, and it will offer rest and refuge to flocks migrating along the increasingly congested and built-up Atlantic flyway.

All wildlife species will prosper in the area, including non-game birds and animals. Birds of prey will have a place to live and raise young in an age of constricting people pressures.

As land prices increase, the area's economic value will go up. But this is only a small part of the return on the Middle Creek investment. Far more important will be Middle Creek's value as a recreation and conservation education site.

Consider this: over six million people live within a 75-mile radius of the Middle Creek Wildlife Management Area. We need to show these and other citizens the importance of wildlife and its place in our society, and Middle Creek will be an accessible and interesting classroom. The Game Commission urges Pennsylvanians to visit Middle Creek. Come to hike, hunt, photograph birds and animals, and learn about wildlife and its management. Come to enjoy and to learn.

(More Middle Creek pictures follow)





Looking at

A CAMERA CAN record m
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the attraction of Middle Creek
and wildlife—in the area. But
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FIELD NOTES

Needed Ornithology Course

ERIE COUNTY—Last season we fined a fellow for shooting a belted kingfisher from a duck blind. He said he thought it was one of those "woodpecker" ducks, because it had one of those long, pointed beaks. I explained a wood duck, a woodpecker and a kingfisher were distinctly different birds.—District Game Protector A. C. Martin, Erie.



Learning the Hard Way

TIOGA COUNTY—On the first day of small game season, I contacted a farmer concerning an automobile which was parked in his field. The farmer stated he didn't think anyone in his family had given a hunter permission to drive and park in that field, but he would check and if he needed any assistance he would let me know. A little later I saw the farmer spreading manure in the same field as the car was parked in. Matter of fact, he was spreading manure right next to the parked car. From the appearance of the car after the manure spreader passed, I don't think that hunter will ever again park in someone's field without permission.—District Game Protector C. L. Keller, Wellsboro.

Deer Season Insanity

FULTON COUNTY—Deer season insanity has always been a puzzle to me. Normally rational, well-organized men do some strange things. The Sunday prior to the opener, gale force winds were driving rain and snow. Even so, all around guns were popping as fellows chose this last day to sight in their rifles. Of the numerous calls and visitors I had, five had forgotten their licenses or, by accident, had brought the license of another family member. One chap in a station wagon came from Philadelphia with enough gear to set up housekeeping, all for a two-day hunt. Unfortunately, his rifle was back in Philly.—District Game Protector C. E. Jarrett, McConnellsburg.

Working Woman

ADAMS COUNTY—My wife has taken a very active interest in my job and does more than just answer the phone and operate the base radio station. On the opening day of small game season, she received a call that a small doe had run into a woven-wire fence and broken its neck. Unable to locate a unit in the immediate vicinity to take care of the animal, she and our three children, aged 4, 5 and 7, went to pick up the deer. They drove about two miles down the road and found the deer. They were able to get it into our old station wagon and returned to my headquarters. She said it's no wonder that people sometimes steal roadkills, as a group of hunters in a nearby field didn't even question their taking the deer. I wonder if this is what has happened to all those other roadkills I've been unable to locate?—District Game Protector G. W. Becker, Gettysburg.

Got a "Sweet Tooth"

POTTER COUNTY—Seeing deer while on jacklight patrol is a common occurrence, but recently we had an unusual experience. Deputies Smith and Frith were with me on night patrol and we were sitting and watching for poachers when several does started milling around the car. The window was open and Deputy Smith was unwrapping some brownies. I noticed one doe put her nose in the air with her ear back. I took one of Deputy Frith's brownies, held it out the window and softly called to the doe. The doe came up to the car and ate the brownie out of my hand. I then tried the same thing with potato chips, but she didn't have any interest in them.—District Game Protector R. G. Clouser, Galeton.

Swan Migration

ERIE COUNTY—Saturday, November 16, was the peak of the annual southward migration of whistling swans. It was truly a sight to behold; standing on the shore of Lake Erie, I could look in any direction and see thousands of them. One flock consisted of approximately 10,000 birds—it was over half a mile long and several hundred yards wide. Many people thought they were snow geese, but whistlers lack the black wing tips found on snow geese. Quite a sight and a wonder of nature!—District Game Protector R. Meyer, Fairview.

Heavyweight Hare

FOREST COUNTY—A hunter asked if we were stocking snowshoe hares. I asked why, and he replied, "Just saw one of those enormous creatures in the field along the creek." We returned to the area to find a very big tame rabbit which had been released by a camper from Pittsburgh. "I'll bet that thing weighs 12 pounds," the astounded hunter said. Well, we do raise them big around these parts.—District Game Protector A. N. Pedder, Marienville.



Oh, Dear, Deer?

BERKS COUNTY—A man and wife were in a sporting goods store, and the husband was trying to select a colored vest with an attached game bag. As he surveyed the size of the bag, his wife commented, "Gee, dear, that bag is awfully small to hold a deer."—District Game Protector J. J. Snyder, Kutztown.

Three to Remember

MCKEAN COUNTY—A game protector receives many letters through the span of a year. I received one the other day which I thought might be of interest. "Sir: Thought you might be interested in getting some information for the guys that are always complaining about not seeing any game (usually the road hunters). While hunting turkey out of my dad's camp at Betula, I saw what you might call the triple trophy dream. In the early morning I saw the most beautiful 8-point buck ever, then a little later I scared out a good-sized sleeping bear. Several hours later the dream was completed when a nice turkey flew over my head. This all took place within a half mile and just a half day. I didn't bring home any meat but did get a lot of great memories (thanks to the Game Commission). Regards, P. A. Cherry, 333 Broad Street, Butler, Pa."—District Game Protector D. A. McDowell, Jr., Smethport.



Father's Great Long Whiskers

BEDFORD COUNTY—Each fall, you see many more men wearing beards in preparation for deer season. Deputy Bob Burkett told me about a man in the vicinity of Hyndman who probably found himself wishing he had never started one. During small game season he missed a squirrel which ran up a nearby tree. Following the path of the squirrel with his shotgun and trying to pump another shell into the chamber, the hunter got his beard caught in the action of the gun and had to get help to have it removed.—District Game Protector B. L. Warner, Bedford.

Apple Pickin'

CLARION COUNTY—One night last autumn, about midnight, I was summoned by a deputy who had been watching some fields where motor vehicles were reportedly being driven. The deputy said he had seen lights in the field that looked like motorcycles going back and forth, but he could not hear any motors. I listened and waited for the mystery lights to reappear. When they did, they turned out to be flashlights in use by three people on horseback so they could see to pick apples.—District Game Protector J. G. Bowers, Knox.

An Opener to Remember!

CRAWFORD COUNTY—Ray Armstrong, of Black Ash, told me about his opening day of small game season. In the morning, he shot a turkey, returned home, dressed the bird and called up friends to go hunting together. Before meeting the friends, Ray drove to his lumber mill. Up in a field he saw around ten pheasants and a grouse, which was fighting with one of the ringnecks. Ray got out of the truck, loaded his shotgun, walked up through the field and shot the grouse. He also bagged two of the pheasants, which flushed when the grouse did. He returned home, cleaned the birds, took his friends turkey hunting and called in a turkey which the friend's son shot. What an opening day that was!—District Game Protector W. E. Lee, Titusville.



Ashamed to Beg?

BLAIR COUNTY—This confusing incident was reported to me by Deputy Long of the Blue Knob area. Long was summoned to investigate a deer being hand-fed while standing along the highway. Upon arriving at the scene, he observed exactly that situation. Curious as to why a healthy-looking whitetail should beg for feed, the deputy jumped from his vehicle—only to have the deer look in his direction, leap up and disappear into the woods. Could it be that game protectors should wear white hats just to show the wildlife we're the good guys?—District Game Protector D. D. Martin, Hollidaysburg.

Noisy Nursery

HUNTINGDON COUNTY—While the Southcentral Division deputy elimination pistol shoot was going on, a mother barn swallow brooded her young in the command post as 32 shooters did their thing. Mother instinct overcomes all factors.—Law Enforcement Assistant J. D. Moyle, Huntingdon.

This is Your Life . . . .

CLEARFIELD COUNTY—Did you ever sit for four or five hours trying to complete your monthly reports while answering the phone every 10 minutes; chase off to check a deer someone thought was shot (to find it was hit by vehicle); stop to look at some puppies a hunter found and didn't know what to do with; take a hasty break for the unusual treat of eating supper with the family; have a moment when you felt like saying the heck with the Field Note and not write any? Well, I just did!—District Game Protector J. R. Furlong, Ramey.

That Relieved Feeling

SCHUYLKILL COUNTY—Investigating a shot on the opening day of buck season, I came upon two persons standing over what looked like an antlerless deer. One hunter said, "I never saw anything like it. This deer had antlers when I shot." I could see two bloody circular areas where the antlers had been attached. The hunter then said, "I wonder if I could be arrested if I try to take the deer out." I was clad in a rainsuit and he had no idea I was a game protector. He showed me where he had first shot at the deer. I followed its trail and found the antlers (it had been a 5-point) that the deer had knocked off as it stumbled along after being shot. I then identified myself and had the hunter tag his deer.—District Game Protector S. L. Opet, Tamaqua.

Great Program

UNION COUNTY—Under the direction of Mifflinburg Middle School Principal Tom Mutchler, assisted by Teacher Bob Manotti, the school has initiated a mini-elective gun and related safety program. The schedule is one period a day and runs for nine weeks. At the completion, all students qualifying receive hunter education certification. There are 175 students enrolled at the present time. The Game Commission furnishes material and guidance for the new program. The potential benefits to all concerned appear almost unlimited.—District Game Protector J. S. Shuler, Lewisburg.



Cockbird One to Alpha Leader . . .

CUMBERLAND COUNTY—We release pheasants at certain times during small game season. Last year a hunter who couldn't see the Game Commission truck from where he was standing was evidently astounded at the sight of 10 cockbirds flying toward him in close formation. He just stood there looking at the pheasants and never raised his gun to shoot. He had probably tramped the fields all day and seen one or two birds, and 10 at one time was just too much to believe.—District Game Protector J. P. Filkosky, Mechanicsburg.

Goose Problems

BERKS COUNTY—The beach at French Creek State Park has been closed this year due to "poor water quality." Geese staying on the Hopewell Lake have been accused of being partly to blame for this condition. In order to eliminate this portion of the problem, Game Commission personnel removed 151 geese from the lake. We also made similar removal from two other smaller lakes in this district to try to improve the water quality and shore conditions of these ares. The nuisance geese were taken to less-crowded areas.—District Game Protector J. A. Leiendecker, Reading.



Beaver Tale

HUNTINGDON COUNTY—At a newly-established beaver dam in the northern part of this county, an ambitious young beaver got a bit carried away with his work and forgot to plan the fall of the tree. The beaver chewed through the tree and it started to fall, apparently in the wrong direction, for the tree ended up on the beaver's tail. Two hunters found him in his predicament and attempted to release him, but he wanted nothing to do with them and made such a commotion that they left and called me. I arrived a short time later to find just a few hairs left under the tree. Mr. Beaver had gotten away with little physical damage, but I imagine his pride is hurting somewhat.—District Game Protector E. N. Gallew, Alexandria.

Dapper Game Protector

LUZERNE COUNTY—I'm not the best dressed Game Protector, but I do like to try to look neat at all times. It's not out of the ordinary for me to change clothese halfway through the day after having messed up an outfit picking up a badly mangled highway-killed deer. This was the case recently, and I put on a new outfit to deliver a box trap to a lady complaining of rabbit damage. She said, "You must not have done any work today, you look so neat and clean!" I said that had I arrived with soiled clothes, the talk of the neighborhood would have been about the scroungy officed that delivered the box trap. After a while one becomes accustomed to never being right.—District Game Protector R. W. Nolf, Conyngham.

Welcome Back

PERRY COUNTY—Upon my return from a fishing trip to Canada, my wife told me she had had only a couple of calls and no deer had been killed on the road while I was gone. Fifteen minutes after my return, a man knocked on the door to tell me about a road-kill that had occurred at three o'clock that afternoon. After taking care of the deer, I answered nine more complaint calls before finishing the night with two more road-killed deer. Canada wasn't like this.—District Game Protector B. K. Moore, Loysville.

What a Crew!

LACKAWANNA COUNTY—On June 5, 1974, Food & Cover Corps foreman Roland Stanton, Russel Ney, foreman for the Valley Seeding Company, and I had the thrill of a lifetime. We saw a mother bear and four cubs on State Game Lands 221. Not often does a person get to see a bear with cubs, much less one with quadruplets.—Land Manager J. F. Serfass, Gouldsboro.

By Ted Godshall

Antlerless Extension Explained

PRELIMINARY reports indicate that the Game Commission's decision to extend the antlerless deer season by one day in the northwestern and northcentral parts of Pennsylvania resulted in a harvest of several thousand whitetails which could have faced the possibility of starvation in the event of a long, hard winter.

Following an analysis of the regular two-day statewide antlerless season on December 16 and 17, the Game Commission authorized a one-day extension of the season in twenty northwestern and northcentral Pennsylvania counties because of inadequate harvest in those areas.

The purpose of an antlerless season is to control the size of the whitetail herd and keep it in line with overwintering food supplies and out of conflict with other uses of the range as much as is possible. Unfortunately, it cannot be the aim of antlerless deer hunting to give everyone an opportunity to take a deer, however desirable that goal may be from the hunter's point of view.

In southern and northeastern Pennsylvania, food supplies for deer are not quite as critical this winter as in some other years. Winter starvation losses were far less likely to occur in these regions in light of the estimated harvest during the regularly-scheduled two-day season than could be expected in the northwest and northcentral areas.

Prior to the 1974 season, the Game Commission had announced that it desired a statewide antlerless deer harvest of close to 60,000 animals.



THE PURPOSE OF the antlerless season is not to give everyone the chance to take a deer, but to control the size of the herd and keep it in line with overwintering food supplies and out of conflict with other uses of the range.

Despite miserable weather conditions all over Pennsylvania, field officers estimated that hunters took more than 25,000 whitetails on the first day of the antlerless season. Perhaps 17,000 or more were bagged on the second day.

While all northeastern and southern counties may not have produced a harvest as large as had been desired, the number of whitetails taken was believed to have been sufficient to avert starvation losses during the winter, and

an extension of the season was not necessary.

In some counties in southern and northeastern sections of Pennsylvania, it was estimated that hunters had taken more antlerless deer during the scheduled two-day 1974 season than had been desired. A statewide extension could have produced an undesirable overkill in those areas.

But the situation in northwestern and northcentral Pennsylvania was different. Hunters had not harvested enough deer in those counties to ward off starvation losses this winter in the event of severe, prolonged weather conditions, and a one-day extension of the season was warranted. Consequently, an additional day of hunting was authorized in twenty northwestern and northcentral counties.

Two Previous Extensions

On two previous occasions, the Game Commission had extended the antlerless season; for two additional days in 1967 because of bad weather, and for one additional day in 1968 because of an inadequate harvest. The extension was statewide on both occasions.

During the two-day extension in 1967, hunters reported taking an extra 26,695 antlerless deer. Of this total, 11,131 were taken in the twenty-county northwestern and northcentral areas. In the one-day extension in 1968, hunters reported taking an extra 13,681 antlerless whitetails. And of this total, 5,814 were taken in the same twenty northwestern and northcentral counties.

Numerous complaints were received that the Game Commission was discriminating against hunters in counties closed for the extended season. It was also argued that since all hunters had paid the same fees for antlerless licenses, they should all be permitted to participate in an extended season. Unfortunately, such factors could not be the most important gauge the Game Commission used to make its final decision.

The welfare of the wildlife resource is the most important of all considerations when the Game Commission establishes seasons and areas for taking game. The flexibility built into the program surfaced above all in the 1974 antlerless extension decision.

By limiting the areas open to extended antlerless hunting, the harvest was concentrated in the sections where starvation losses were most likely to occur. And by limiting the number of hunters to those who already had antlerless licenses for the counties open to extended hunting, the Game Commission was able to control the size of the harvest.

By law an antlerless license is valid only in the county in which it is issued. There is no way an antlerless license issued in one county can lawfully be used in another. Also, to have permitted an antlerless deer license holder in the closed area to hunt in the open area would have resulted in unmanageable hunting pressure and an uncontrollable overharvest of antlerless deer.

Traditionally, the Game Commission has a built-in conservative approach to wildlife management. When it acts, it does so with the best interests of the resource foremost in mind.

Favored Ducks

Pintails are among the favorites of American ducks. They are named for their elongated central tail feathers and are often called "sprigs" by gunners.



WOODLAND THOUGHTS

BY LOU HOFFMAN
Wildlife Education Specialist

Sharing, on a winter day, the woods and fields with those having fur and feather commands respect for these "lesser" creatures. Whether trying to ferret a cottontail from a brushpile during the extended season, or walking with a camera or a stick, the observations are similar. Individual conclusions differ, though, and returning home there are some that wish to extend to wild creatures the conveniences of civilization—especially the warmth of a home. But nature takes care of her kind, and that sort of thinking reduces wildness to domestication and cheapens the marvels of a winter's scene.

WINTER IS a challenging season. Even a few hours of poking around the woods pushes my internal furnace to overtime. Icy winds chilled by the frozen north shoot off the slopes and into the valley. The presence of the parent air masses that drive these younger squalls are as sure as the season itself. The cold against the face tightens the cheeks and pushes the pulse. Gusts of wind traveling slower than sound gather in the treetops hundreds of yards away. Their march toward me is announced by a roar as deep and loud as the power they yield. Limbs sway, creak and even break. Lifelessness lives and the chill is, in a way, warming to the mind. That warmth is short-lived, though, and hardly real. It's not easy standing motionless as heat released by exertion is quickly lost.

Sharing the natural world for short periods is easy enough, but to linger for longer periods is physically trying. Thermals and thermos are but little defense against this barren season. Barrenness, though, is a relative term and depends on the individual. Just as we have devised fiberglass and thermopane to combat the cold, so too have wildlife adapted, in more natural ways, to the season. The hollow hair of the whitetail is the tireless and classic example of an efficient machine designed to withstand winter's chill.

In addition to the insulation of its coat, the deer's movements are more restricted now and a few hundred yards may represent its daily range, for needless movement burns valuable energy. Even more reduced is the activity of the black bear, whose winter sleep deadens its senses to its surroundings. Unless the bear is about to give birth to cubs, its den site may be little more than a natural depression, a windfall, or the foot of a large hardwood. Not totally oblivious to the surroundings, its bodily functions are almost normal, and a bruin may stir about for short periods during warm spells for reasons we have yet to know. Regardless, this reduced activity curtails food requirements.

There are, though, Rip van Winkles



WINTER IS A CHALLENGING SEASON. Icy winds chilled by the frozen north shoot into the valley. It's a difficult time for wildlife. Yet it has survived for countless years . . . without man's efforts.

in the animal world and they sleep the winter away, depending on last fall's gluttony to sustain their much reduced life systems. The woodchuck, deep in its burrow, rebuffs winter by literally turning its back on that part of the calendar.

But just as the furbearers may slow down, the feathered ones turn into high gear. Food is needed to keep their warm-blooded thermostats going. They forage almost constantly.

Birdlife is more concentrated now. Weedy spots and unfrozen streams and swamps attract sparrows, juncos, chickadees, nuthatches, and other northern arrivals. Downy woodpeckers are particularly abundant and can be seen working cornstalks, suet feeders or tree trunks. The common but colorful cardinal adds to the landscape as did the maples, gums and sumacs of last fall.

The horned owl, whose calls the deer hunter hears, forgets the cold by turning his attention to a prospective mate. The calendar year marks, for his kind, the beginning of the reproductive cycle. At first this seems a case of bad timing, but young owlets will be demanding the most food just as their prey begins having their own young. The result is a banquet-like setting for this avian predator.

Walking through fields and along woodland borders is easier now, for the brush is not as restrictive as last fall. Though annoying, the beggar-ticks and burdocks catching on sleeves and cuffs are signs of the future and of a green spring. The seed heads of the cattails are scattered by the wind and, when landing in a location that is wet enough, they start next season's growth. Without the camouflaging cover of leaves, the thorns of the multi-flora rose are now obvious. Within these thickets small rodents find protection from predators.

Woodlot branches starkly silhouetted

against the sky seem less than dormant, but close examination shows new buds tight against the stems. With warming days and new sap flow they will swell and seem to appear overnight. But now, times are tough.

Because they must range farther for prey, hawks are more easily observed. Red-tails glide from one open field to another. Sunlight reflected occasionally from the upper side of the tail makes identification certain. Sparrow hawks, or kestrels, hover over grassy areas, wings fluttering rapidly. When the time is right they fold and fall to earth like meteors—usually to miss their darting targets. But success must be found if they are to survive, and eventually the capture of a not-so-alert vole or mouse brings a close to the day's hunt.

Constant Drama

Amidst the constant drama of life and death, the season closes with enough survivors to start spring's chapter in nature's continuous volume of events.

Wildlife survived winter before man had time to care . . . even before man existed. Many individual animals will not survive this trying time, but their kind will pass the test and the species will go on.

Our problem, it seems, is concern for the individual. Transferring our feelings for fellow humans to creatures of the wild is deceiving. Social and medical programs that help counter human ills are non-existent for sick, injured, or weakened animals. We should not try to make an exact parallel between the situations of humans and non-humans.

A good example of a misguided effort is the feeding station. Bird feeders aren't vital for birds. They concentrate wintering flocks, disrupt population distribution, and may compound disease and parasite problems. They might also turn into playgrounds for neighborhood cats. But it makes us feel good to supply foodstuffs even though the real reason for constructing these feeders is to make it easy for us to see birds. We may even humanize the situation and suggest that visiting birds thank us through various gestures and movements. This is ridiculous.

This is not to say that man cannot help wildlife to endure periods of stress. Stress, though, is not limited to winter. Lack of nesting sites in the spring, or scarcity of loafing areas in the summer, or even the lack of a place to range in the fall, are as critical as winter's cold. Think habitat. Given that, wildlife can do the rest. It is equipped naturally to survive even the worst drama. But it needs a stage to carry out that play, and that stage is a place to live, which we call its habitat.

If we could somehow capture the interest of all those who are concerned about wildlife during the winter and apply that concern to the welfare of wildlife habitat, wild animal populations would be helped significantly. The hollow hair of deer, the layer of fat surrounding the bear, and the down feathers of the junco are all natural designs that have counteracted winter's cold for millennia. Human concern,



Photo by Leonard Lee Rue, III

KNOWING THAT A two-ounce junco can successfully contend with the winter's cold gives a good feeling, though one that is slightly humiliating to human "superiority."



GIVEN THE PROPER HABITAT, wildlife can take care of itself. Nature has provided rabbits, deer, birds and all other creatures with the "equipment" needed to survive, so long as they have the environment for which they are fitted.

then, for a wild creature during winter is largely a misguided concern.

It is important to retain wildness in wildlife. Humanizing and, in effect, domesticating those wild creatures that must contend with the cold, weakens thoughts collected during a winter's walk. Pushing through snow on an old logging trail may be exhausting and cold, and the thought of spending the night would not be pleasant. Yet knowing a two-ounce junco can successfully contend with those same conditions gives me a good feeling, though one that is slightly humiliating to my human "superiority." Those things add value and perspective to the human experience and must be separated from a civilized society. Therein lies the beauty of wildness and wildlife.

Lou Hoffman is the newest member of the Game Commission's Information and Education staff. As Wildlife Education Specialist, he is working to coordinate the educational programs of the Commission. This is the first of a series scheduled to appear in alternate issues of GAME NEWS. It is intended to share the thoughts of the outdoorsman with all readers—hunters and non-hunters alike.

The Facts on Gun Registration

"Gun Registration: Costly Experiment on Crime Cure?" is the first of a projected series by the National Shooting Sports Foundation designed to cut through the emotion and distortion of fact surrounding current "gun control" arguments. In 20 fact-filled pages, the booklet covers popular pro-registration arguments, typical legislative measures, probable costs and the results (or lack of results) that can be expected from gun registration moves. Also discussed is the astounding fact the disclosure requirements attached to registration would amount to forced self-incrimination according to the U.S. Supreme Court (Hatch v. U.S.). Hence, convicted felons need not comply.

Individual copies are available from NSSF, 1075 Post Road, Riverside, Conn. 06878, for 25¢ each with a self-addressed stamped envelope.

"A PISTOL IS A PISTOL?"

By Susan M. Pajak

BEFORE I GET a hundred or so letters saying, "Hey, you're reading that from a book," I'd like to say right off that, yes, I am reading this from a book. But it's such an interesting story about how the word *pistol* came into our language that I wouldn't want it distorted.

The title of the book is *Why You Say It* (p. 381) by Webb B. Garrison, Abingdon Press, and the story goes like this:

"Medieval towns frequently specialized in making just one article of commerce. Such was the case with Pistoia, Italy. Her artisans designed and produced a distinctive type of dagger—as big as a short sword, but light and delicately balanced. A favorite with cutthroats as well as sporting gentry, the weapon took its name from Pistoia and was called *pistolese*. A later and smaller model, something of a cross between the pistolese and stiletto, came to be known as *pistoletto*.

"It was this weapon which became famous in fights ranging from the field of battle to street-corner brawls. No sword could match its effectiveness in close quarters. Invention of gunpowder made the tiny killer drop into obscurity. *But its name attached to a miniature firearm which could be employed with one hand, and the pistol became a major factor in changing the pattern of Western life.*" (Emphasis added.)

The use of the word pistol, then and now, to include all types of handguns, is not correct. But habits such as this are as hard to break as the shell surrounding a hickory nut—you'll have to use a hammer if you expect to get anywhere at all . . .

Simply stated for our younger readers, a revolver is a revolver (because it has a cylinder which revolves),



HANDGUN SHOOTING is a sport enjoyed by many women. Here, Susan Pajak, Irene Serfozo and daughter Diane pause for photo. Stephanie Pajak and Vickie Serfozo will soon be old enough to begin practice with their mothers.

and it is a handgun; but under today's accepted terminology it should not be classified as a pistol. A pistol is a pistol and it, too, is a handgun; however, since it has no cylinder, it should never be classified as a revolver.

The term pistol refers to two types of handgun, the single shot and what is commonly called an *automatic*. The latter is a repeating handgun which usually has its cartridge supply in a detachable clip or magazine located inside the handgrip. When an automatic pistol is fired, part of the energy of the fired cartridge is utilized to extract and

GIRLS, GUNS, & GAME...

eject the empty cartridge case, cock the firearm and chamber a new cartridge. It probably is more correct to call this type of gun a *semiautomatic* or *autoloader*, but the term *automatic* is so ingrained in the public's mind that it doubtless will never be changed.

Our earliest firearms were probably the "hand cannons" of the mid-1300s. It would be hard to recognize these as guns today—they looked like flower vases laid sideways and used a hot iron or live coal to ignite the gunpowder through a touch-hole in the barrel. Nevertheless, they were the forerunners of today's high quality handguns. They had been developed as a way of using the force of burning gunpowder, which probably was discovered in the early 1200s, to propel a projectile through the air and toward an enemy. Further development led to the matchlock, the wheel lock, the flintlock, the percussion cap, and on to today's great cartridge guns.

The series of events in handgun development and manufacturing that occurred between the 14th century and the 19th century is totally enthralling and I can only suggest that you seek out this part of your heritage in the many firearms books available for reading. You have a treat in store!



Photo by Tom Fegely

LEHIGH VALLEY OUTDOOR SPORTS SHOW, to be held March 19-23 in the Castle Garden Hall at Allentown's Dorney Park, promises to offer sportsmen a true outdoor show, devoid of anything unrelated to legitimate outdoor sports. In addition to displays, there will be daily seminars on outdoor activities. Shown above is part of last year's big game trophy display.



MARK PASSARO, JR., AND Don Lyons, of New Cumberland, are building a cabin of their own, and they intend to live in it.

EVERYONE WANTS A LOG CABIN..... DON'T THEY?

By Les Rountree

WHEN I WAS TEN years old I went with my father to visit an old "woods rat" named Carl Zietler (I think that's how it was spelled). The old-timer was over 80 and a bit hard of hearing, but I was fascinated by his stories of early lumbering days along the Hammersley Fork. He had total recall, so it seemed, of every detail of every story. I figured out in later years that he was also inclined to stretch the truth a little, but that's the prerogative of old men . . . . it has always been that way.

Zietler lived in a log cabin that seemed immense to me at the time, but it couldn't have been more than about 16 feet square. What a fascinating building! It had three windows and a rough-hewn pine door that hung on handmade hinges. The logs had all been carefully fitted by Zietler himself and he recollected that he built the cabin in 1891, although he wasn't too sure when he started to cut the logs. He thought it was 1889, but he had gone off and got "hisself" married during that year and tried city life for a while.



LOFT OF THE Passaro/Lyons cabin has a window in each end, will provide a sleeping area when the traditional frontier-style structure is done.

His bride didn't want to live in the woods, so he gave marriage up as a bad deal and returned there alone.

He never left. He cut a little pulp wood, fished some, hunted most of the year and trapped during the winter. What a life! How I envied Carl Zietler and his wonderful log cabin. I vowed to build my own cabin someday and live in the woods and hunt and fish and trap and do all of those neat things.

Thirty years later I'm still planning to build that log cabin, and I'm betting that a lot of other latter-day Carl Zietlers are, too. Mark Passaro, Jr., and Don Lyons of New Cumberland are one up on us. They're building one right now over on the . . . . . wait a minute. I'd better not pinpoint the location, or it might not stay the secluded spot it is now. Mark, 20, and Don, 21, got the idea after reading *The Foxfire Book*.

In case you don't know about this fascinating volume, you should. Briefly, a Yankee schoolteacher who found himself on the edge of Appalachia in the state of Georgia, with a classroom full of mountain offspring, discovered that a lot of old ways were still very much in evidence. Making do with what the land provided was still a way of life in that part of the world and he set about chronicling things like planting by the moon, making oak shingles, moonshining and making log cabins. *The Foxfire Books*, 1 and 2, are part of Eliot Wigginton's efforts to preserve some of the traditional American skills. They are fascinating reading.

Mark and Don managed to acquire a small tract of land that had some standing timber on it—timber that was the right size—and began to turn the dream of a million boys into a reality.

At this writing, the cabin is about in mid-construction and everything appears to be going well. They followed the Foxfire instructions, but with some exceptions. They elected not to split oak butts into roof shingles as the book demonstrates but instead will use oak boards and cover them with rolled roofing. Not exactly the purist's way of doing it, but a whole lot less tiring. They also allowed themselves one luxury that the old-timers didn't have, a chain saw. Notching the logs goes much faster with one of these gasoline cutters. Their cabin will be approximately 12 x 20 feet. The walls are mostly oak with an occasional birch log here and there. The only sawed lumber in the building will be the 3 x 3 oak roof and loft supports and the oak boards on the roof itself. Everything else was cut on their acreage.

Building a cabin out of logs and then living in it is one of the most personal acts of handcraftsmanship imaginable. It's akin to building a canoe or painting



a picture. There are a few basic skills to be learned, but after these are understood the actual construction is a creation of the mind and heart. There are no two authentic log cabins in the world that are exactly alike—they are as individual as fingerprints. In areas where log cabins are still being made with some regularity, the local folk can tell, just by looking, who the builder was. The personal imprint is that obvious. The way logs are notched or the way doors and windows are hung are dead giveaways to the practiced eye.

Most Available Material

While log dwellings have been made since medieval days, it was in America that the log cabin gained its greatest following. Logs were the most abundant building material available and the early settlers quickly made the best use of them. The first North American log cabins were rather crude affairs with logs untrimmed and lightly notched. Many did not last very long, for the construction was not always good. As woods wisdom increased and the combined thinking of many ethnic groups began to meld in this new land, more log cabin sophistication emerged. Logs were square hewn with the broad ax and adze and more permanent methods of joining logs were developed. Tongue and groove variations were used at the corners and tapered interlocking joints that required some mathematical skill came into use. Lap joints and wood-pinned rafters marked the cabins of skillful craftsmen. A few of these better structures, some over 200 years old, are still standing.

There are as many theories about what to build a cabin out of as there are styles of construction. Some recommend constructing the cabin with green logs, thus allowing the natural shrinking of the wood to tighten up the joints. Others insist on allowing the



USE OF A CHAIN SAW was a break with tradition by the young men, but it speeded up the work a great deal, both for cutting trees for logs and notching them for construction.

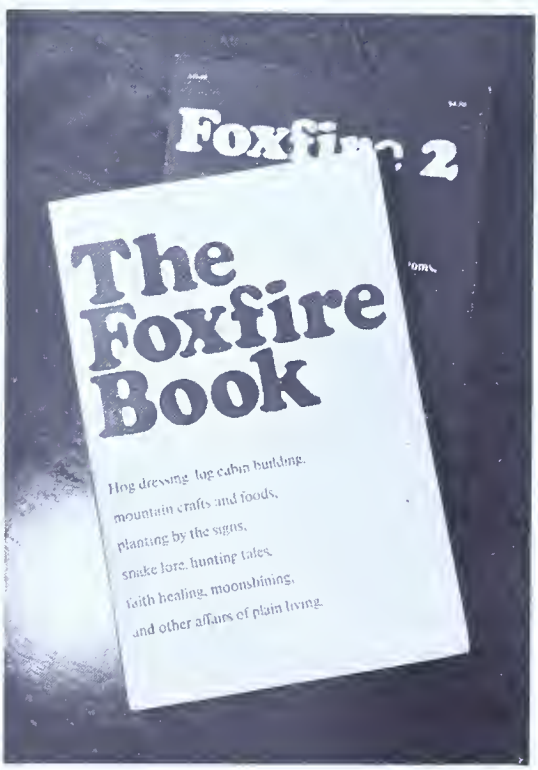
wood to air dry for at least a year before beginning construction. Some cabins put up with green wood are still standing many decades later, and so are many dry lumber structures. On the other hand, some finely constructed cabins didn't last 20 years before decay took effect. The prime reason for cabin crumbling seems to be too much shade and the constant dampness connected with it.

I have never built a log cabin, as I admitted earlier, but I have watched a few go up and helped notch a log or two. From what I've seen, it's easier to build a cabin with one of the conifers, such as spruce or pine . . . . if it is dried out and the resins stop oozing. These logs are lighter in weight and that's a big factor if no mechanized equipment is handy. Hardwood logs such as oak, birch and maple will last a long time if the roof doesn't leak . . . . but these logs are heavy to handle and tough to chop or saw.

There are a dozen acceptable ways to notch logs or otherwise form the corners of your cabin and *The Foxfire Book* shows several in detail. However it's done, care must be taken to "eyeball"

each log into place and try to make the natural configuration of one log match up reasonably well with the preceding one. This takes a bit of practice, but by the time one builds a cabin he'll know what it's all about. Then, of course, the only thing to do is build another one!

Back in the early days before manmade composition shingles were available, the most durable roof was one made of wooden "shakes" or shingles. Depending on where you lived, different woods were used for this purpose. In the northern climes, cedar shingles were the favorite and in the South, oak "boards" were tough to beat. A time-consuming task, the business of splitting shingles out of an oak trunk log, but no better roof has ever been made. Using a steel wedge and a go-devil, a two-foot butt is halved, then quartered and then split into as many equal parts as necessary. The boards, as they are called, are then trimmed to the desired thickness and nailed onto the roof overlapping each other. If laid right, water spills from one shingle to the next and doesn't have a chance to seep into the cabin.



MARK AND DON decided to build their cabin after reading "The Foxfire Books," which preserve in print many of the old-time American frontier skills.

Chinking up a cabin is again decided by personal choice and available materials. I spent two weeks in a cabin in New Brunswick one time that was chinked with nothing more than strips of moss jammed into the space between the logs. Admittedly, some of the moss would have to be replaced each year, but it worked well and didn't cost a dime. Okum is a popular chinking material in cold climates, although a much neater appearance can be obtained with a wood adhesive mortar. Plain old cement will work, too, if the logs have dried out. If some of the gaps are a bit wide, the addition of hardware cloth will give the mortar something to cling to. Mark and Don plan to do this and I'm guessing that it will work out fine. Incidentally, they plan to live in their cabin when it is completed this summer. A hardy pair!

Chinking

Perhaps another reason why some very old log cabins have survived the ravages of time—and others have not—is the quality of the chinking material. I'm sorry, maybe some of you don't know yet what chinking is. Well, it's the filler that goes between the logs to prevent the wind and varmints from getting in . . . . and the heat from getting out. In some parts of the country, native clay works fine for chinking. If the clay isn't pasty enough, it may be necessary to mix it with a bit of lime and sand. You can then chink on the inside after the outside mortar has set up.

A far better job is obtained if the inside is paneled with boards that extend across the gaps. The outside chinking material can then be packed solidly against the paneling, sheetrock, plywood or a number of manmade

products. But if you are a purist you'll want to split the boards yourself and do it the old fashioned way. That's the beauty of building a log cabin. There is no *one* way to do any of it. It's a free spirit sort of thing, and anything goes as long as it's durable and suits the builder. The latter is probably the most important consideration.

Perhaps the most important thing to remember about chinking is that no matter what material you use, be sure to finish it off in a concave shape between the outside of the logs. It presents a much nicer appearance and prevents the water that runs down the side of the cabin from seeping in between the logs. If the chinking is built up to extend beyond the face of the logs, water can be trapped and will speed up the rotting process.

Porches, lofts, additional rooms and almost any sort of refinement can be added at any time. A number of outstanding log cabins began as tiny, one-room cubbyholes that blossomed over the years into huge log extravaganzas. Your imagination is the only limiting factor.

You could heat the inside of a log cabin with a handsome potbellied stove, or a more functional sheepherder's stove (nothing more than a rectangular metal box). But the ideal thing for such a noble structure is a native stone fireplace. Building the fireplace and the attached chimney or "chimly," as the mountain folk call it, is no small trick. A fellow by the name of Ev Duell who used to live in Sweden Valley, Pa., was a dandy chimney builder and so was his father. They built several hundred of them across the northern part of this state some years ago, and most are still in operation. They were random rock affairs for the most part and were not specially-cut stones. Few gauging instruments were used by Duell and fewer still by the old-timers who were building cabins 200 years ago. Yet most of those old fireplaces "drew" well and never smoked up the inside of the cabin.



SOPHISTICATED DOVETAILING method of interlocking logs was photographed by Rountree on cabin in wilds of Saskatchewan. Though difficult to cut, this makes a strong corner.

The trick is to build the chimney with a slight taper and construct some sort of an inside sill that will catch any foreign material that happens to fall in from outside. Exactly the right depth must be built into the fireplace to allow smoke to get past the ledge and up the chimney with a minimum of turbulence. There must be some mathematical principle involved in the construction of fireplaces, but I'm sure I don't know what it is. The old-timers knew how to build 'em, and it seems fairly obvious to me that a lot of modern builders don't know how. If you doubt this, ask a number of your suburban friends how often they use their fireplaces. The answer usually is, "Can't use it, smokes too much."

Cutaway drawings of four basic types of old-fashioned chimneys are in *The Foxfire Book*. They are fascinating to study and make you wonder how the uneducated cabin builder of yesteryear learned to construct such efficient smokestacks. Another amazing observation is how the old-timers know almost precisely *where* the high water marks along rivers were going to be. It was astounding to note how many 200-year-old structures along the Susquehanna River were not touched by the ravages of Hurricane Agnes when the surrounding areas were devastated. Our great-great-grandfathers were simply more observant, I guess, and took a little more time to ponder things.

Starting from scratch with a pile of logs and ending up with a building to live in must have been a great satisfaction to the early settlers. But then, on the other hand, they *had* to build their own houses. They had no choice. It was either build something or sleep on the ground. There were no building contractors around then, and they couldn't have afforded to pay to have a cabin built even if there were. Today's provider is required to bring home the bacon in the form of money only, and he can hire someone else to do the building for him. Yet, in the heart of every hairy-chested outdoorsman of the 1970s, there is a corner set aside for a log cabin of his very own. It's tucked away in an imaginary out-of-the-way place where a fresh spring flows nearby and the cabin's windows are placed so that the morning sun is the only alarm clock he needs. What a sweet dream! And we'll all have it some day . . . . won't we?

Mark and Don are going to have it now, and what's more they intend to live in it. They won't have running water or inside plumbing but will have the inner satisfaction of knowing, when they see their cabin standing there, that they built it themselves. Only one problem. They think that they just may want to install a small generator. For electric lights or television? No. If you are a parent who has raised teenagers during the past 10 years, you know the answer. It's for the stereo record player, of course! That is the one modern convenience that today's young people will not forsake at any cost. But maybe that's not to be chuckled at. Even Daniel Boone or Jim Bridger might have enjoyed a little spot of after-dinner music.

Got room for an extra bunk, fellows?

Note: *The Foxfire Book* (380 pages, $3.95) and *Foxfire 2* (405 pages, $4.50) are published in softcover by Anchor Books, Anchor Press/Doubleday, Garden City, N.Y. Your local bookstore probably has them or can order them for you.



PGC Photo by CIA Fred Servey

THESE TWO Pittsburgh-area hunters had more to show for their time in the woods than a nice buck. When they stopped at the deer check station on Interstate 79, they had several bags of litter brought out of their hunting area. We all should follow their example.



YOUTH AND BEAUTY FOLLOW the tournaments. These are the daughters of longtime archer Al Oswald, Roberta, Jeannine and Karen. As well as being experts on the range, the girls are bow hunters too.

An Overall Look at . . . .

OUR STATE STORY

By Keith C. Schuyler

Photos from the Author

WITH AN EXPECTED 200,000-plus bow hunters participating in the 1974-75 hunting season, archery has taken on added importance in Pennsylvania. Growing interest in the hunting approach has helped set a new course for the Pennsylvania State Archery Association, the real arrow spine and bow strength of the sport in the Keystone State since its inception on July 10, 1931, at Skytop Lodge in the Poconos.

Despite this increase in hunting activity, the number of archers in the P.S.A.A. has not kept pace. A number of reasons have been advanced for this apparent inequity. The only one which seems to have any substance has been the orientation to target archery over the years. Yet even this argument appears to lack substance when one considers that the National Field Archery Association, a more hunting-oriented organization, failed to maintain a foothold in the nation's leading state in both target and hunting activity.

It is a considered opinion here that a great fault in organized archery has been a failure to utilize publicity media—newspapers, radio, television—to the extent available. The frequent complaint against the media travels full circle to end up right in the lap of the complainant. Unless each club, as well as the state organization, becomes publicity conscious, the occasional backyard bullseye-covered straw bale

will be the only reminder, other than commercial effort and the twice-a-year state tournaments, that archery exists.

Newspapers are the more obvious and useful means of publicity. Yet reporters can't be expected to utilize their Sundays to beef up interest in the local archery club by attending tournaments. This is particularly true today when the cost of newsprint and competition for news space is at an all-time high. Even without these current handicaps, remoteness of the average archery range or field course presents its own difficulties relative to arousing interest in the news media. And the same sports reporter, who may be knowledgeable enough to officiate at a baseball or a football game, thinks a bracer is an after-dinner drink and thinks the players should have the spine and arrows point the way to the rest room.

Publicity

How, then, is archery to get the publicity you and I think it deserves? How are we going to induce more of those 200,000 bow hunters into supporting the organization that largely made their sport possible? How is archery going to compete with spectator sports for room on the crowded sports page?

There are no positive answers. But there are methods which, according to the record, have been for the most part untried.

As a starter, try to find somebody in your organization who has an interest in journalism. Failing that, appoint someone with a typewriter, at least a high school education, and a dictionary. All he or she needs to get started is the answer to the questions "Who?" "What?" "When?" and "Where?"—and a news story can be written.

A visit by the club reporter and the president to the local newspaper sports editor (after press time) will be of considerable value. Since he doesn't know if you or one of your relatives has stock in the newspaper or are one of its leading advertisers, he'll listen. Anyway, *news* is his business. He will tell you what he considers to be news for his sport pages, how to set it up, to whom it should be directed, deadlines and datelines.

You can probably get the same space as the bowling team if you provide a concise report on scores. But keep in mind that scores in themselves are not news. They merely provide a record of the outcome of the contest. News is when something special happens to make that particular contest more interesting than the usual.

For example, the photo of Linda Myers right after she set a new *world's* record at the 70-meter distance in the F.I.T.A. round was news when it happened in the state target tournament held at Valley Forge last fall.

The fact that Al Oswald's lovely daughters Roberta, Jeannine and Karen have each excelled in their archery classes is news that might even set comfortably on the social page of a newspaper near their Pittsburgh home. Almost every tournament of any note has useful news stories. This does not mean that the event in itself is not news, but an occasional happening might move the story closer to the front page—if it is written!

Radio reporters frequently welcome a change of pace. When an archery event is in the making, an interview with the area's top archer can increase interest and attendance. You can't tell the interviewer how to conduct the interview, but you can be of help. Type out a list



of likely items of interest: club officers, name of person in charge of refreshments, how to get to the site of the activity (most clubs seem almost to delight in hiding their location from strangers), the archers to watch, parking facilities, etc.

Don't expect the reporter to seek you out. Turn your new publicity chairman loose on him. He may even want to do a newscast on location if your inquiry is interesting enough.

If something really hot is coming up, contact your nearest television station as well. It is unlikely that the sports director is going to get overly excited about a routine tournament, but he may be happy you called to let him know of an important event.

For example, Harry Allaman traveled some 240 miles round trip to film a contest between the Berwick Archery Club and Council Cup Muzzle-Loaders Association last year. It was colorful, with Indian and pioneer costumes, and there was plenty of smoke and fire mixed with fellowship and refreshments. Most of all, it was *different*. It was news. And it made an interesting Sunday program on Harry's "Call of the Outdoors," sponsored by Glatfelter Pulp Wood Company over Lancaster's WGAL-TV, Channel 8.

Should a TV station be interested in one of your events, it is most important that everything be provided to assist the cameraman. Since filming may not be practical during a tournament, get together a team to provide footage. Preferably, if filming is done before competition starts—sometimes necessary because of failing light toward the end—utilize archers who are likely to win or at least stand high in the ratings.

The Pennsylvania State Archery Association has, as previously mentioned, adopted a new direction in the hope that interest in organized activity can be broadened. As President G. M.



BOB CICULA, new executive secretary of the P.S.A.A., succeeding Clayton Shenk, who served nearly 40 years in the position. The job is a demanding one.

"Cookie" Goetz said repeatedly during the past year, "It is up to the clubs to tell us what they want. If they tell us, they'll get it." He attended as many regional tournaments as possible to find out just what activities clubs most preferred.

Today, there is no tournament sanctioned by the P.S.A.A. that does not have something for any archer, no matter what his preference. Classification cards are available for the following rounds and divisions: Field—barebow, freestyle, bowhunter, youth; Target—barebow and freestyle; Indoor—barebow and freestyle.

As evidence of the extent to which target archery is now carried, Blaine Long of Benton became the first contestant to enter the National Archery Association indoor national tournament at Harrisburg last year in the bowhunter division. It is expected that this year he will have competition. Advent of the compound bow, with its flatter trajectory, has made it possible to shoot the longer distances in the 900-round indoors.

At the state team tournament sponsored by the P.S.A.A., the Falcon Archery Club of Canonsburg entered



ROD HOOVER, Myerstown, has a right to look pleased after shooting this target. Rod had things his own way in the barebow division at Valley Forge State Tournament.

two teams in the bow hunter class. The first team nosed out Halifax Archery Club, 1541 to 1521, both respectable scores when it is considered that bare bow heavy tackle was employed. It is expected that there will be more competition in this division in 1975 utilizing hunting bows and hunting weight arrows.

The most important fact to be gained from these activities is that bow hunters are being more and more recognized in competition. Although it is true that the class has been actually legal for years, it wasn't even listed on the application cards. The benefits to be gained in producing better hunters for the field are immeasurable. New emphasis in this direction is certain to add to interest in competitive shooting with the bow and arrow.

There are many more facets in organized archery which *is* the Pennsylvania State Archery Association. As new executive secretary Bob Cicula has pointed out in his newsletter, "What you read is what you get." And he has made a new effort to inform members of the advantages in the state organization.

The newsletter itself is an important plus. It keeps archers up to date, not only on local, area and state tournaments, but also in providing a rundown on any action or activity in the state which affects archery. It is a forum for any member who has something to say. Reports on local shoots other than those sanctioned by the state organization are listed. It helps attendance and serves both the clubs and those looking for something to do on the off days when no official contests are scheduled in a particular area.

For example, the newsletter reported on East Stroudsburg State College's first Indoor Open Tournament when 172 competitors participated. It keeps tabs on the Bow Hunters Festival at Forksville each year. These are not even P.S.A.A. functions, but they are *archery*. Even though the two mentioned events are at the opposite ends of the spectrum for bow benders, each has its own appeal. News, in advance and after, serves archers and archery.

100 Pages of Information

The Year Book alone is worth the price of admission. This pocket-sized publication has over 100 pages of information vital to anyone who is interested in competitive shooting. In addition, it lists all associated state clubs, 112 of them, with the current officers, the address and telephone number of the secretary, directions to ranges, and the shooting facilities available. All official rules and rounds for both target and field shooting are provided for both national and international competition. The book is updated annually.

Special insurance programs are available to clubs or individual members that incorporate the group concept to cut costs. Many clubs today own their own properties. Some were bought when land values were much more reasonable than today's inflated

prices. A law suit could wipe out the accumulated gains of many years. Consequently, whether on an individual club basis or through the association, liability insurance for bodily injury and property damage or protection of some sort becomes increasingly important today.

Although any organization has its rules, and official P.S.A.A. events generally adhere to national regulations, there is no attempt to dictate to clubs at the local and conference level. Consequently, any individual or organization affiliating with the state association gives up no identity.

Pennsylvania is divided into six regions which follow the same geographic lines as those of the Pennsylvania Game Commision. Two board members are elected from each region to carry on the work of the association. From these, 12 board members are elected officers to lead the way. This arrangement assures that no part of the state is neglected in representation.

Individual membership in P.S.A.A. is $5 annually. To encourage family participation, a man, wife and one dependent under 18 years of age are admitted for dues of $8. One additional dependent adds $3 for a total of $11. Husband, wife and all dependents, regardless of number, pay $12. However, if more than one individual has membership under a family plan, only one year book and one newsletter are sent to the family address.

All mail to the organization should be addressed to Robert A. Cicula, Executive Secretary, P.S.A.A., 526 Maple Street, Warminster, PA 18974. In November, 1973, Bob succeeded Clayton B. Shenk, who had served nearly 40 years in the position. Shenk continues as executive secretary of the National Archery Association.

It is noteworthy that Pennsylvania archers last year held 20 of the top 40 rankings announced by the National



LINDA MYERS responds with a smile to congratulations on setting a new 70-meter world record at the State Target Shoot recently.

Archery Association. First place in five of the six divisions was held by Keystone sharpshooters. So not only does this state stand at the head of the list with by far the most bow hunters, but also among the state's archers are a preponderance of top score contestants. It can never be said that we just have a lot of archers, for they include some of the best in the world. Pennsylvania's John Williams, who has moved from the ranks of amateurs to make archery his profession, was indeed *the* world's champion with his Olympic gold medal that climaxed an amateur career second to none in any sport.

So there are countless reasons to encourage anyone in archery to become a part of all this. Those already involved should take pride in the affiliation.

It is necessary that as many as possible build upon the legacy laid out in concentric circles in the back yards, barns, basements and great halls of the country. It is important that others look to the hills and valleys to preserve and to enjoy the hunt and the harvest.

This is all part of the archery story in our state of Pennsylvania. Let it be known.

Letter Answering Time

By Don Lewis
Photos by Helen Lewis



LEWIS HAS OFTEN advised varmint hunters to use heavy barrel rifles for better accuracy, but sometimes—as John Coleman here finds out—a miss is still the result!

IF THERE'S ONE THING that irks me to no end, it's writing a letter and not getting a reply. With this philosophy, you can imagine how troubled and downcast I feel when faced with the impossible task of answering dozens and dozens of letters from GAME NEWS readers. I honestly have made attempts over the years to answer each letter—and other than several hundred that received water damage, I have on file all letters I received—but I simply can't answer them individually.

Many gun buffs are interesting writers, and I have spent hours reading these letters. I would like to answer each one, but since the majority are technical in nature or require extensive research, getting a reply back is sometimes a physical impossibility. About all I can do is incorporate many of the questions and problems in future GAME NEWS columns. This is why I want your letters to keep coming and trust you will understand if you don't get an answer.

While sifting through a couple of hundred letters one evening, I decided to write a column covering some readers' problems. It's sure not like getting a personal answer, but at least it will express how grateful I am to all of you for reading my material in GAME NEWS. So here goes.

A dyed-in-the-wool chuck hunter stated he had a number of fine varmint outfits, including a Remington Model 700 22-250, the M77 Ruger in 25-06

caliber, and a 700 Remington in 17 caliber, all equipped with 12X scopes. He was wondering if adding a Remington 40XB in a caliber I would suggest, along with a Redfield 3200 scope, would improve his shooting success.

As most of you know, I've been a chuck hunter for around two-score years, and have fired at one time or another practically every varmint cartridge in both factory and wildcat versions. The early years were spent in quantity hunting with a constant search for more power. As my hunting time and experience grew, I came to the conclusion that the paramount factor with a varmint rifle was its ability to place the first shot on the aiming point.

Although chuck hunting is done during the warm months, it's surprising how many rifles require a shot or two before getting back to zero, and this is especially true with the light hunting barrel models. When I began to use this criterion in judging varmint rifles, I forgot about brand and caliber. I once wrote about a $400 used custom Swift that gave the appearance of being the world's best but wouldn't shoot a two-inch group at 100 yards with any load I could concoct. On the other hand, a decrepit Model 70 Swift I picked up for a mere $65 stayed under 1-1/4" group after group.

I certainly would not hesitate to suggest the 40XB equipped with a 12X 3200 Redfield to any varmint hunter, as I know it's capable of star performance. I have used the Remington 40XB-BR 20"-barrel outfit on a number of hunts, but would suggest for the chuck hunter the 26" barrel over the shorter benchrest version. There's no question this fine outfit has tremendous accuracy, but any other rifle that has a potential of around an inch at 100 yards and will put the first shot on the point of aim shouldn't be discarded. When the dedicated chuck hunter understands his outfit and knows how to shoot it, there's not much gained by adding another expensive gun.



No Absolute Answer

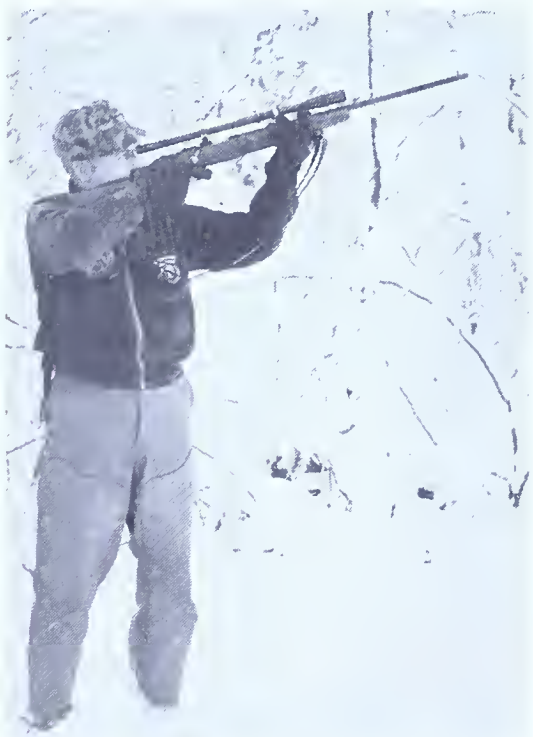
While on the subject of varmint rifles, one reader listed a number of well-known factory makes and wanted to know which one was most accurate. He explained that he had an affinity for one well known brand, but if it wasn't tops in the bullet placement category, he wanted no part of it. In all fairness to any gunwriter, there is no absolute answer to this type of question. Go back to my problems with the expensive custom-made Swift. Every aspect of that rifle reflected superior workmanship, and it should have been A-1 in placing its bullets. On the contrary, the rifle lacked in some manner.

I suppose I have fired most of the factory products many times over, and once in a while I got one that just wouldn't shoot. When buying a chuck gun, my first choice would be selecting a heavy barrel over the regular hunting barrel to help steady the hold, and I would insist on getting an adjustable trigger or an action that would accept some type of adjustable trigger. After experimenting with the current heavy-barrel varmint rifles available now, I found all to be reasonably accurate with consistent groups of 1-1/2" or less at 100 yards. I also felt that if I had the time I could have by careful handloading put all makes and models into the inch class. That kind of accuracy is not to be scoffed at by any means.

Over the years, a large number of readers have complained about problems in getting guns repaired, and

during the last three years my mail has indicated gun owners' displeasure from manufacturers' lack of cooperation in sending gun parts. I know this is exasperating, but it stems from several factors. First, most gunsmiths work only part time at this job; gunsmithing is seasonal in Pennsylvania, hitting its crescendo in October and November and thus creating a backlog of work that no one man can hope to finish before opening day. Therefore, guns should be taken in for repair at the earliest moment so the 'smith will have time to get parts and then do the work.

Since the 1968 Gun Law went into effect, there are restrictions on mailing guns and components to non-licensed (federal firearms license) individuals through the mails. Also, the majority of today's gun companies are not set up to do a speedy mail order parts business. A few have tried to remedy the situation by establishing authorized service stations around the nation. A score of years back, parts could not only be obtained quickly from the original manufacturer but also from parts supply houses, but these are rapidly disappearing from today's scene.



MANY READER INQUIRIES concern squirrel hunting. For this, Lewis advises selecting a target-grade rifle with a high quality scope. He prefers to fire from a rest, but occasionally conditions require an offhand shot.

So far as warranties go, I send a detailed letter explaining the gun's problem along with a copy of the purchase slip which proves the age of the gun. Once I went so far as to get a letter verifying the purchase from the dealer who sold the gun. From many years of first-hand experience, I firmly believe that the established gun companies are honest and want to satisfy every customer. As with all businesses, gun companies have problems galore, but I'm certain each one will do whatever it can to keep a customer satisfied.

One reader complained he would not buy a certain gun because its manufacturer would not alter the choke to his liking. The company had suggested seeking the services of a competent gunsmith for this job, but the prospective customer felt the company should be responsible for this work. While not taking sides with the manufacturer, I know of no automobile company that would alter an engine or transmission at the request of the customer. It's reasonable to assume this could snowball into a problem beyond control. Other than a specially ordered outfit, the company will no doubt stick with its standard line of products. Otherwise, it would be inundated with all types of special requests.

It's not always the contents of a column that bring letters; photos, too, have a way of stirring up interest. There's always the usual run of mail seeking advice about equipment shown, but I think the simple rod with an adjustable shooting arm I use for chuck hunting brought more letters than any other item. I'm happy to report several adjustable rests are now available, and

one firm will be on the market this year with an adjustable tripod rest.

Another photo that brought some attention was my shooting vest with the extra long sleeve on the shooting arm. The readers were unable to find this vest in any store, and for a very good reason: I had a friend in the furniture repair business sew on the extra padded sleeve. Occasionally, rifles with certain type stocks slip from my shoulder and slide down my arm during a benchrest session. One or two shots aren't bad, but a constant pounding on the arm muscle is not conducive to accurate shooting. I solved this touchy problem by using a standard trap vest and adding the extra padded sleeve with a snap band to keep it in place.

Light Loads

One thing always leads to another, and mentioning my friend in the upholstery repair business brings to mind the large amount of letters received after the "Reduced Load" article in October, 1973. My good hunting friend, Tom Leete of Coudersport, shared his vast experience in the reduced load field and collaborated with me on that article. Although there were many questions regarding various loads and bullets, one question still remains uppermost in my mind. A number of readers were curious about the dacron filler used, and most thought it was a special ingredient that was difficult to find. Actually, the dacron filler can be purchased from any upholstery repair shop. Tom's extensive tests showed the tiny amount of dacron filler used with these loads left little or no residue in the barrel and never caused him any problems.

One concerned reader asked if shooting a slotgun slug through a full choke barrel would cause immediate damage. In this field, I have not done much testing and none whatsoever pertaining to that particular problem. Most slug makers specify there is no



HANDLOADING permits a knowledgeable shooter to adapt his outfit to various kinds of hunting. For instance, he can brew up reduced loads which will make his deer rifle suitable for squirrels.

danger along this line, and from the measuring I've done with micrometers I'm inclined to agree. Naturally, I'm speaking only in terms of general big game hunting and not severe or extensive shooting over a long period of time.

The testing I did with the four regular slug shotguns proved to me in a hurry that the hunter living in an area requiring their use would be better off to purchase the short-barrel shotgun designed primarily for slugs. Some terrific groups were fired at 50 yards from my benchrest during those tests, with several touching at just two inches for five shots. I've shot some big game rifles that didn't do much better.

Being an avid squirrel hunter, I try to get a rifle-hunting squirrel article out every now and then, and judging from my mail, a sizable amount of GAME NEWS readers have switched to this fascinating sport. The main question from the mail bag asks which 22 rifle model is best. Here again I'm not trying



A LOT OF readers are interested in using rifled slugs in their shotguns for deer hunting. These do not harm guns, but Lewis obtains best results with special "slug shooting" shotguns like these.

to evade the question, but I must revert back to the part of this article about the varmint rifle. It's a tough question to answer, and, in fact, a true answer really isn't in the books. I suggested the heavy barrel for the varmint hunter, and I'm inclinded to feel somewhat the same way about a squirrel rifle. The heavy barrel on a varmint or benchrest outfit tends to stabilize barrel vibrations along with adding a certain amount of steadiness to the hunter's hold. With the semi-target 22 barrel the extra weight only contributes to the hold and, contrary to popular belief, does little for accuracy.

A highly interesting gentleman from out of state wrote me a nice letter about his problems with a lightweight semi-automatic 22 that gave him accuracy and holding problems on his squirrel hunts. He was kind enough to credit me for showing him the error in using a very lightweight rifle, for when he switched to a scoped bolt action outfit that weighed close to eight pounds, his problems began to disappear. After missing four squirrels in one day with the little semi, he claimed my advice began to sink in. The switch to the outfit weighing almost twice as much brought a sudden surge to his success. In fact, he scored 14 hits out of 17 tries. And brother, that's terrific squirrel shooting in any woods.

The heavy barrel on the bench and varmint models also decreases the amount of heat build-up that could possibly "walk" the barrel. Barrel heat-up is not worth mentioning in my book as far as the average big game hunter is concerned. True, the benchrest addict wants plenty of steel to absorb the constant heat build-up, but, it's unlikely an overheated barrel would play a significant part in a big game hunt. With the 22 rifle barrel, heat is never a problem, but the extra weight makes a tremendous contribution on a tough 50-yard head shot at a wily gray or fox squirrel.

If a rifle change is contemplated, give some serious thought to the semi-target outfit with adjustable trigger. My rule of thumb for determining accuracy for a squirrel rifle requires that 90 percent of all shots fired should land within an inch at 50 yards. This may require testing a number of brands of ammo before consistent groups will be cut, and in almost every rifle fired I got the best results from some brand of target-type ammo.

Scoped Shotguns

A few letters crossed my desk asking about scopes on shotguns. I must admit that during the years I was a gunsmith I mounted less than a half-dozen scopes on the scattergun where drilling and tapping were required. I recall drilling several pumps and semis that had sufficient stock metal on top of the receiver to hold a full-size scope. From this limited experience, I would be inclined to think the big game hunter would have no problems getting a scope on a

pump or semi-automatic shotgun.

One question pertained to drilling the rib on an over-under rifle and shotgun combination. I've never done this, and I would have serious doubts about doing it. First, the rib is not an integral part of a barrel, and the inertia of a full-size one-inch scope during recoil could break the rib loose or pull the screws out. I know it would hold for a period, but after seeing a number of scope mounting problems on different rifles I would vote against mounting a conventional big game hunting scope on the rib of any shotgun.

One reader worried about using military ammo in his 30-06. He'd been told that this was the worst thing that could be wished upon a barrel. Well, that's sheer nonsense. In the first place, hundreds of hunters are carrying accurate ex-military rifles that have had hundreds and perhaps thousands of rounds of military ammo fired through them. The average barrel will stand a lot more abuse than most shooters think, but I do follow a simple philosophy about barrel wear. I don't subject any accurate barrel to excessive shooting, although I practice as much as needed. For safety reasons alone, I stay clear of hot loads, and I vigorously scrub my best barrels with a brass brush and barrel solvent as frequently as every 20 shots.

A brass brush will not hurt a barrel in any manner. I keep an eye on the brush to keep it from wearing down to the iron center, which could possibly damage a bore. Other than that, I'm not overly concerned with barrel life, and would not hesitate to shoot a few rounds of military ammo through any of my '06s. I'd prefer to avoid GI ammo with corrosive primers, though, as that makes cleaning more of a problem.



NUMEROUS RIFLE manufacturers make heavy barrel models, such as this M70 Winchester, for varmints. Lewis advises readers to choose this type when top accuracy is wanted.

During the 10 years I've written the gun column for GAME NEWS, practically every type of question pertaining to shooting and hunting has crossed my desk. No doubt I could easily write a dozen more columns similar to this one, and I might just do another at a future date. For now, with still many, many letters to go, I'll again express my appreciation for all the mail. I trust many of you will continue to write concerning gun problems, handloading techniques, and other interesting aspects of the fabulous gun world, even if the chance of getting a direct reply is small.

Let me close by saying that getting a letter from a GAME NEWS reader anywhere in the world is always a welcome moment in my home. Just keep it up, and I'll do my very best to get an answer back in one form or another.

Aqualung

In spite of its armor, the armadillo is a good swimmer. If the distance across the waterway is short, it walks under water on the bottom.

In The Wind

by chuck fergus
information writer

The most valuable gift to conservation ever made in the U.S. has been donated by a group of South Carolina sportsmen. A 25,000-acre tract of prime waterfowl habitat, valued at $20 million, was given to the Nature Conservancy, a land conservation organization, by 25 duck hunters, members of the Santee Club. The area, which will be known as the Santee Coastal Reserve, contains over 18,000 acres of irreplaceable wetlands and is home to a variety of wildlife, including two on the Fish & Wildlife Service's endangered list, the Southern bald eagle and the American alligator. Much sought after by commercial developers, this land will now remain as part of the nation's wildlife heritage.—South Carolina Wildlife

Two of the nation's largest and oldest conservation organizations—the National Audubon Society and the Sierra Club—will co-sponsor a major international conference this year on protecting wilderness throughout the world. The 14th Biennial Wilderness Conference, to be held in New York City in June, will determine how to best protect the world's priceless mountains, forests, grasslands, beaches and other wild areas.—Earthcare

An all-time high of 375 rare tule elk were counted in Owens Valley, California, last summer. The previous high in recent years was 340, tallied in 1973. Adult-young ratios showed a 17 percent population increase last year. Though slightly below the 19 percent increase of the previous year, this still represents continual growth in numbers of this threatened species.—Wildlife Management Institute

A tentative "position paper" by the U.S. Fish and Wildlife Service recommends that the grizzly bear be given "threatened" status under the Endangered Species Act in the U.S. south of Canada. Need for the action was brought about by continual shrinking of grizzly habitat and resulting conflicts between bears and human interests, the paper said.—Wildlife Management Institute

Thomas L. Kimball, executive vice president of the National Wildlife Federation, recently warned the nuclear power industry against taking environmental shortcuts in its effort to help the U.S. achieve energy independence by 1985. Kimball said the American public will not accept nuclear power unless the industry devises "reasonable, acceptable methods . . . . for the safe transport and storage of plutonium and radioactive wastes."—National Wildlife

Curtailment of the use of DDT is showing up in monitoring surveys on indicator species compiled by the U.S. Fish & Wildlife Service. Results from a 100-station monitoring network show declines of DDT in the bodies of starlings and fish, but no change, up or down, is evident in analyses of duck wings.—National Wildlife

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COVER PAINTING BY J. M. ROEVER

Nearly everybody is familiar with the V-shaped flights of Canada geese seen over our state during spring and fall migrations. There are also local resident goose populations in Pennsylvania, including flocks at the Game Commission's Pymatuning and Middle Creek Wildlife Management Areas. The Canada goose's deep, resonant call has earned it the name "honker," and the big bird is enjoyed by hunters, photographers and naturalists alike. Money from the sale of hunting licenses provides habitat improvement and restoration, thus ensuring the future of this waterfowl species.

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More On the "Big Q"

THIS IS BEING WRITTEN ON the last day of January. It's the last piece of copy to be prepared for the March issue. It's late, and the make-up man has been hollering at the typesetter and the typesetter has been hollering at his boss and his boss has been hollering at me . . . which is only fair, I suppose, since I'm usually hollering at them. At the moment, though, I'm only yelling at the mail room people, but they say everything is my fault and pay no attention to my comments. The reason for all this hullabaloo? THE QUESTIONNAIRE!

For the last few days (since the February issue was delivered), all of us around here—my secretary Betsy Maugans, John Behel's secretary Pam Hoffman, Ted Godshall, myself, even Chuck Fergus when we can pry him away from his typewriter—have spent all of our spare time opening envelopes and bundling up questionnaires. I dunno how many are in at the moment, but it's a pile. And we appreciate it. It's good to know that you're interested enough to help us out. It's too early to have any idea what the breakdown on this will be like. A usable summary requires transferring this data to the electronic equipment, so we can pull out the required totals quickly and accurately, and that will take months. But sooner or later it will get done and then we'll let you know the results.

You'll recall there was no space allotted on the questionnaire for readers' comments. We had discussed making space for this but decided against it as there's no way to key random comments into the data processing machinery. Nevertheless, a considerable number of you, being independent-minded souls, simply used the margins to let us know your feelings on one thing or another. Some of these comments were serious, some humorous; all were informative. Even if we can't summarize them electronically, all were read and will have some influence on our thinking. Many of you took the time to write a letter and enclose it with your questionnaire, either expounding at greater length on the items or asking questions of your own. Normally, all letters which come in here get a personal reply, but in this case it may not be possible, due to lack of return address or the inadvertent separation of the letter from its envelope. At any rate, if you don't get a reply to some specific question, this is the reason. If it was important, please try us again.

That's it for this month. I know this is shorter than usual, but Winnie Naples just brought in another box of envelopes and I gotta help open 'em.—*Bob Bell*

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Thoughts On Thunderbirds

By Al Shimmel

THE GRAY FLINT EFFIGY that lay in my hand was of fine workmanship. Some ancient craftsman had spent much time and labor to create a ceremonial piece of religious significance. In the same collection were two other thunderbirds, some projectile points, drills, a bone fish hook and two arrow straighteners. These dated back to the Eastern Mound Builders culture. Could it be that the flint had been fashioned to resemble a drumming grouse?

In a museum exhibit was a tom-tom with the painted symbols of thunder, lightning and a thunderbird. A pair of grouse tailfeathers formed part of the decoration. The thunderbird was thought by these ancient people to control thunder and lightning and bring happiness. The sound of a tom-tom—the thunder of a flushing grouse—the rolling beat of its mating call—the idea that our state bird was the original thunderbird—is not so inconsistent as it first appears.

There is ample evidence that ancient Americans found the grouse to their liking. From the layered debris of the Frankstown Cave in Pennsylvania to the Potter Creek Cave of California, grouse bones have been excavated. A Wisconsin mound, shaped like a bird with outstretched wings, lies well within the range of the ruffed grouse.

The ancient Indian was stimulated by natural sounds. I believe he invented the tom-tom to imitate thunder and perhaps the drumming of the grouse. What other explanation for the use of these symbols on the drum? Proof? I have none, except that the flint artifacts remind me of the grouse.

The range of the grouse covered nearly half of the North American continent and coincided with the territories occupied by the mountain and woodland tribes. The Indian's close association with nature and the poetic imagery of his expression were part of his reverence for the mysterious forces that governed life. It was natural that the thunderbird should be included among his sacred symbols.

One of the early settlers recorded the fact that the red hunter sometimes lured the grouse within range of his weapons by beating on an inflated bladder. The Indians used this method during the spring mating season when they wished to preserve the hens . . . perhaps conservation is not so new an idea as we are led to believe.

"Fool Hens"

Our European ancestors became acquainted with grouse almost as soon as they arrived. They were impressed by this bird's abundance, delicious flavor, and apparent lack of fear. They promptly named them "fool hens." One of these hunters tells of finding 40 birds perched in one tree. Powder was too precious to burn on such tame quarry, so he fitted a noose to the end of a long stick and snatched the lowest bird while its companions sat clucking in amazement. He repeated the process until he had killed upwards of a dozen grouse. Only then did the remainder of the flock take flight. I profess that when I read this account I took it with the proverbial "grain of salt." Even though he was a Puritan, that

hunter may have trifled slightly with the truth.

When I was not yet old enough to carry a gun, I occasionally accompanied a more mature friend who was an avid hunter. "Beanie" had two assets, a single-barreled 12-gauge which, when used with the old black Climax shells, was lethal at both ends, and a black-and-white fox terrier named Skip. Skip was a hunting fool with an enthusiasm that occasionally exceeded his capabilities. He was particularly effective on squirrels but was not a specialist. His ears were tatters from encounters with cats and woodchucks.



DURING THE SPRING mating season, Indians lured grouse within arrow range by beating on an inflated bladder. The sound resembled the rolling beat of a male grouse's mating call.

On the day in question, Skip had fallen into disgrace. He had found a skunk in the hollow base of a big tree and, true to form, had assisted in its rather smelly departure from this world. That brought our hunt to an abrupt end. We trudged down the hollow, keeping Skip at some distance by pelting him with sticks. I left my companion where the home path led around the shoulder of the ridge. Here a field had been planted to buckwheat. As I trudged along the edge of the field, I heard a shot and a shout from my companion. A flock of grouse headed in my direction. Wonder of wonders, they alighted in the branches of a tree only a few yards away. Twelve plump birds I counted. So unusual was the incident that it was indelibly etched on my memory. I can still picture the black breast barrings, the folded tails and the inquisitive cock of their heads. What boy with an ounce of hunting blood in his veins could resist? I slowly stooped and picked up a stone. As my missile ricocheted among the branches, the birds scattered in all directions.

Curiosity Born

Fired by early contact with this noble game bird, a curiosity was born in me that has not diminshed through the years. This study has indirectly resulted in more productive hunting. This is the "method in the madness." During the last week in March, all through April and during the first week in May the drumming season is at its height. During this six-week period I spend as much time in the woods as possible. Early morning is best, but at the height of the mating season the cock often drums at intervals during the entire 24 hours. By traveling from one cover to another and noting the locations from which the sounds are audible, a rather ac-

curate estimate of the grouse population can be made.

When you consider that the food of the adult ruffed grouse is largely vegetable, you realize that few if any drumming stands are far from areas that provide food and cover. The nest is rarely more than 100 yards from the drumming stand. Young birds require high protein food, usually insects which are found in fairly open areas. Because of these basic requirements, grouse rarely are found in dense stands of mature timber. A noted biologist has called the grouse "a bird of the edges."

Belligerant Attitude

A hen grouse, guarding her newly hatched brood, exhibits behavior of great interest to woodsmen and nature observers. The maternal instinct to protect her chicks triggers a belligerent attitude that leads her to display a courage that is totally unexpected in a normally very shy bird.

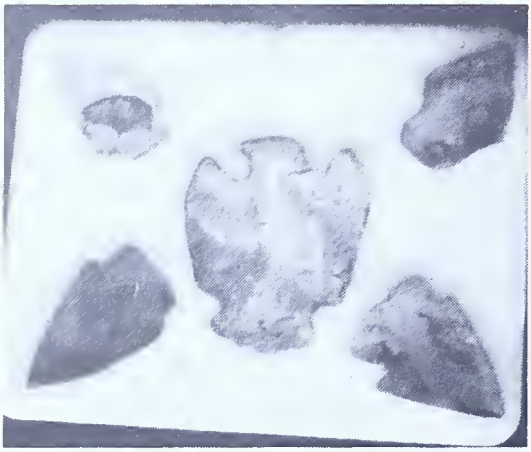
When she encounters danger, she warns her brood, which disappears as if by magic. Then she faces the intruder with ruffled feathers and menacing wings, hissing and squealing to attract attention to herself and away from her helpless youngsters. Occasionally she will fly directly at the face of the intruder but more often will resort to the broken wing trick to lure the intruder into following a seemingly helpless cripple. If the ruse fails, it may be repeated. The female makes a miraculous recovery if the enemy follows her far enough away from her chicks.

I once came unexpectedly upon a brood from which the mother tried in vain to toll me away. I stood still, trying to discover the hidden chicks. Suddenly I saw one within inches of my foot, peering from the shelter of a dried oak leaf. As I stooped for a closer look the mother struck me from



AUTHOR'S FRIEND HUNTS slowly and deliberately and rests often. He reasons that successful grouse hunting requires concentration and proper mental attitude, and that fatigue destroys both.

behind with almost enough force to make me lose my balance. When I stood up she retreated. I moved a short distance and sat down at the foot of a tree. For 20 minutes there was no movement. Finally she returned, stepping cautiously from the underbrush. She moved in a circuitous route, uttering low calls that were barely audible. One by one the chicks slipped from their hiding places, until the entire brood had been gathered. She murmured softly, and they peeped in return as they followed her into the thicket.



FOUR PROJECTILE POINTS surround thunderbird. These artifacts date back to the Indians' Eastern Mound Builders culture. Author wonders . . . does the thunderbird represent grouse?

Another time I was fortunate to witness a confrontation that held all the elements of high drama. A brood of grouse frequented a woods trail where a decaying pine stump furnished an abundance of powdery wood for dusting. I had a comfortable spot, partly screened by drooping pine boughs, and I could see a considerable distance along the trail. By sitting quietly for an hour, I was often able to witness intimate details of the behavior of the wild residents of the area as they commuted between swamp and ridge.

A grouse and her brood of nine were loitering along the trail toward the dusting site when a few yards ahead a weasel, carrying one of its young by the nape of the neck, emerged from the bushes to cross the trail. The burden was fully a quarter as large as its mother. She held her head high in order that the young would clear the ground. So labored was her progress and so intent was she on the job at hand that she failed to see the grouse.

There was a flurry of wings as the grouse bowled over its arch enemy. The weasel dropped her young, stood and snarled. The grouse retreated, spread her wings and prepared to attack. Suddenly the weasel grabbed her young and dragged it into the brush. Within five minutes the grouse was dusting while her chicks loafed and relaxed in the sun as if nothing had happened.

A photographer-naturalist reports that he saw a fox flush a brood that was capable of flight. At the hen's warning cluck they flew up into some low bushes while the adult led the fox away. He reports that the young were not overly frightened but seemed curious observers of the antics of their mother and the fox.

One of my friends who is a rabid devotee of the grouse has a topographic map of his hunting territory. Each spring he goes over the area and listens for the sound of drumming cocks. He marks each location with tiny blue stars. When the season opens he marks the location of each grouse flushed with a gold star. At the end of the season he transfers the locations to a transparent overlay with notes on abundance of food, condition of coverts and kill. His maps are a wealth of information and represent a work of love. Few hunters have the time or inclination to make such a study. To spend a day in the field with this man is an experience never to be forgotten. He seems to know where every grouse in the area will be found.

Deliberate Actions

He is a modest, quiet-spoken woodsman and one of the best shots I have ever seen. His actions in the field are slow and deliberate. His little 20-gauge double has through long use become almost an extension of his personality. On the flush his movements are so deliberate as to seem positively slow, yet he gets on target with a minimum of effort. He is satisfied with a modest bag and

does not over-gun areas where birds are concentrated. After a number of years I have gradually come to know his methods.

He hunts each area slowly and deliberately, resting often. His reasoning is logical. Successfully hunting grouse requires intense concentration and proper mental attitude. Fatigue destroys both. The hunter who expends his energy in random hunting dulls the razor edge of his physical reflexes and mental concentration. When a bird flushes, the tired hunter is rarely in the proper frame of mind to perform effectively.

Psychological Disadvantage

The beginner and even some seasoned hunters find themselves at a psychological disadvantage in the presence of a flushing grouse. The suddenness of the flush, the noise of the wings and the apparent speed with which the bird dodges into the nearest cover urges the gunner to hurry his shot and often the bird escapes unscathed. When a gunner misses consistently, he should remove the shells from his gun and follow a few flushes with an empty shotgun. When the pressure of scoring is removed, the trauma disappears or at least is greatly reduced.

The author, after half a century of gunning, suffered a vision defect in his shooting eye. The lure of the thunderbird was so strong that I resolved to learn to shoot left-handed and left-eyed. A few sessions with clay targets removed some of the awkwardness. The consciousness that the speed of getting off a shot was diminished followed me into the woods. Miracle of miracles—the past season was one of the most successful in years.

In retrospect, some of the highlights of years of following the finest game bird of all stand out sharply. As a boy I peered between the rails of a fence that bordered the woods and saw a grouse strutting and drumming for the first time. . . . I remember the grouse that ran from his dusting place at the foot of a hollow oak, took flight and fell to my shot—my first grouse. . . . I remember the day when my son dropped his first bird with a high crossing shot that would have taxed an expert. . . . Years later, taking photos, I sat so close to a drumming grouse that the air from his wings shook the burlap of the blind in which I was hidden.

I may be mistaken as to the idea behind the flint thunderbird. But the grouse is truly a bringer of happiness (and perhaps much frustration) to his followers. When the winter snows have melted and the first hepaticas are showing blue above the fallen leaves, the mating call of a drumming grouse completes the setting of spring. When there is a touch of frost to color the leaves beside the woodland trail, the thunder of a rising grouse and the pungent smell of burned powder make an autumn day complete. A fan or two to decorate the mantle of the old cabin's fireplace brings memories of the thunderbirds.

Hound Check

An interruption in a trailing dog's run, due to the loss of scent of an animal, is called a check.

Plump of Widgeon, Old Sport?

The British term for a small group of ducks is a "plump."

In Search of Bigfoot

By Dave Drakula



SNOWSHOE HARES and mountain laurel go together. A hunter has to work the big thickets carefully and remain alert at all times if he expects to get a "bigfoot." And if he bags one, he'll certainly feel that the Red Gods have smiled on him.

HIS CHORES completed, the man of the house called the dog from behind the wood-burning kitchen stove, cradled the single barrel on one arm, and dropped several shells into the pocket of his work jacket.

"I'm goin' up on the mountain for jacks," he called to his wife. "Be back shortly."

He returned in an hour. The bluetick trailed at his heels and two snowshoe rabbits flopped against his leg.

At one time that scene was rather common across northern Pennsylvania. But that was years ago.

Today the snowshoe rabbit, or varying hare, lives in secluded pockets across his once-extensive range. The many laurel patches, rhododendron thickets, and the nearly impenetrable jungle of brush that was the by-product of a booming lumber industry are gone. Natural plant succession has cast a deep shadow of shade over the snowshoe's home territory. It's become pretty tough going for the ol' bigfoot.

Nevertheless, there are still some places where combinations of a timber industry, exposure to the sun, and altitude have produced the kind of habitat the snowshoe relishes. Here, he resides.

And here, a group of hunters make their annual trek to test the beagles and attempt to bag one of the big snowshoe rabbits.

I made two such treks last season.

Like many hunting excursions, this outing began innocently enough several months earlier. A few outdoor

writers had gathered for a fall confab and I casually mentioned that we should try hunting snowshoe rabbits this fall. Bud Erich of Elk County responded enthusiastically to the suggestion.

"We'll do it for sure this year," he said. "I know a couple of good places where we can get some action. Just set the date."

After the excitement of small game and deer seasons passed, I remembered Bud's offer. A phone call set the exact time and date.

Our first trip drew a blank. We hunted for six hours in laurel patches and rhododendron. Several inches of snow lay on the ground. Although snowshoe tracks were fairly common, we failed to jump a rabbit. A light snow turned to rain. Fog descended. The hunt came to a soggy, uneventful end.

But Erich and his sidekick Ron Hudsick of Elk County are persistent fellows. They arranged a second trip and this time I was joined by a couple of my fellow Cameron Countians, Dick Fuller and Ed Lamont of Emporium.

We met in the small mountain town of Medix Run in Elk County. After the usual introductions and the wisecracks about each others' hunting skills, we left town and drove to the nearby Quehanna area. This area has been set aside as a Wilderness Use Area. As a result it is largely uncluttered by human intrusions. The specific section we chose to hunt was a large flat covered with a tangle of laurel and rhododendron.

A few words of strategy and then we spread out along a snow-covered dirt road and began working through a dense patch of laurel. King, Ed's beagle, snaked his way in and out of the laurel like a ferret. Hard, crusty snow covered the oak leaves.

Bull Through Laurel

This is rugged hunting that requires a multiple effort on the part of the hunter. I learned very quickly that I had to bull my way through the unyielding laurel. At the same time I had to try to maintain some degree of balance on rocks that projected at odd angles through the laurel. And, finally, there was the obvious necessity of staying alert and keeping an eye on openings where a snowshoe might scamper through.

After plowing through several thickets, I had a vague idea of what a little halfback feels while he's running through a line of tacklers with blood in their eyes and destruction on their minds.

More than an hour passed without anything to report. We rendezvoused to discuss the situation.

"Ron and I know they're in here," Bud explained. "We saw their tracks all over the place just before Christmas. I guess all we can do is keep hunting and hope that lady luck helps out."

Once again we separated and started through the laurel.

In good snowshoe country like the Adirondacks, where the big rabbits are plentiful, hunters often use 22 rifles or pistols. We don't have that kind of hunting here in Pennsylvania. Our opportunities to take a snowshoe are rather limited. Therefore, all of





A HAPPY DICK FULLER of Emporium shows the snowshoe he bagged while hunting in the Quehanna area of Elk Co. Though Fuller brought bigfoot to bag, hunt was more of a "we" effort than an individual performance.

us chose shotguns. I used a 12-ga. double barrel with number 5 shot.

There is something special about hunting snowshoe rabbits. All of us were intrigued by the idea of bagging one. Two of our group had never seen one in the wild before. Ron Hudsick had one to his credit and I had bounced one out while hunting grouse several years before.

Each member of the party had taken numerous cottontails. At least two of us listed the cottontail as the first game animal to ever fall before our smoking single barrels.

But in addition to his size and color, there's something special about a snowshoe rabbit. I think that the snowshoe's home territory had something to do with it. To the snowshoe, home is a lonely mountain ridge where the winter winds howl and his neighbors are deer, bear, turkeys and, in the summer, rattlesnakes. It's a far cry from the briar patches and goldenrods of the cottontail.

There is something special about the character of a snowshoe, too. He doesn't head for the nearest woodchuck hole like many cottontails do. No, he keeps running as long as the dog remains on the trail. If he gets tired, he doesn't show it.

All of these factors made the hunt something special. It became more of a "we" effort rather than an individual performance. "We" wanted a snowshoe.

Some of these thoughts were on my mind as I knelt to examine a grouse track in the snow. Suddenly, a nearby shot brought me bolt upright. The first shot was quickly followed by a second one. Then I heard Dick Fuller excitedly calling the dog.

"What was it?" I yelled, hoping to hear the right answer.

"Snowshoe," Dick shouted. "And I think I hit him."

There was a loud crashing of brush and then Dick's exultant cry. "I got him! I got a snowshoe."

"Holy Smokes," I shouted. "Hey, Bud, Dick got a snowshoe."

Word Passed Quickly

The word passed quickly down the line and in no time Dick was surrounded by four cheering, happy, back-slapping hunters. To see us, you would have thought we had just gotten a trophy buck!

"Son-of-a-gun, we really got a snowshoe," Ed exclaimed. "You know, I was beginning to think we might never even see one."

Dick recounted the action for us. He had jumped the rabbit out of a thick patch of laurel, missed it on the first shot and connected on the second.

"At first I couldn't believe my eyes," he said. "There it was, a snowshoe. I thought I was seeing things."

We examined the snowshoe and I judged it weighed between three and four pounds. It was not as large as I had anticipated. I'd heard stories about snowshoes that weighed six to nine pounds and dragged on the ground when hung from a hunter's belt. Apparently, that is more wishful thinking than fact.

Yellow Underfur

The hair on Dick's snowshoe was perfectly white on the tips with yellow underfur. As its name implies, the snowshoe's feet are very large, approximately six inches long and two inches wide, covered with short, bristly, yellow-white hair. I was amazed at the length of the rabbit's legs. It's easy to see why they are often referred to as "jackrabbits."

After the picture taking was completed, we returned to the hunting. Within an hour Dick had a chance to nail a second snowshoe, missed his shot, and we put King on the trail. This snowshoe gave us a perfect demonstration of how the long-legged critters can run. First, he made several short circles in the laurel. Then he ran a straight line along the top of the ridge until the dog's barking grew fainter and fainter and finally was lost to hearing.

I picked a spot on a large rock so that I could see over part of the laurel. A raven croaked overhead. Heavy wet snow began falling. I turned up the collar of my hunting coat and shivered as a trickle of water slithered down my back. I kept imagining what a snowshoe would look like sneaking through the laurel. My eyes began to water as they searched for movement of white on white.

Well over an hour passed before Ed's voice broke the stillness. "King's back," he said. "Must have lost him."

Once again we regrouped and decided to circle back to the starting point. It was mid-afternoon when we called it quits.

A heavy, wet snow continued to fall as we stood around the cars eating lunch. Surprisingly, several vehicles loaded with snowshoe hunters passed us. We learned from one group that they had killed a snowshoe early in the morning. We also learned that they had heard our "cheering" upon Dick's success.

As we talked about the big rabbit all of us became aware of the lack of general knowledge about snowshoes. For example, unlike cottontails, this member of the hare family does not usually build a nest. The young, usually two to four, are born in April to August. They are fully furred with eyes open, are able to hop around on their first day of life, and are com-



A SNOWSHOE'S FEET are big and covered with short, bristly hair. As a result, the big white hare is able to scamper easily over winter's deepest snows, making it tough for hunters and hounds.



COOPERATION IS AN IMPORTANT ingredient in snowshoe hunting success. Here, Ed Lamont and Dick Fuller await the outcome of a small "drive" by two fellow hunters.

pletely weaned by the time they reach one month of age.

Snowshoe populations fluctuate tremendously, with high points being achieved about every ten years. No one has ever been able to fully explain these "ups and downs" in the bigfoot population.

Snowshoes are truly creatures of the wild. The famous wildlife photographer Leonard Lee Rue III says he has been unsuccessful at raising snowshoes as pets. Every time he opened the pen to feed them, they would try to bite or kick his hand, no matter how long he had them.

Darkness was seeping into the mountain valleys as we drove home to Emporium. The snow had turned to rain and the windshield wipers swished a steady rhythm.

"You know, I never fired a shot, but I sure felt a lot of excitement out there," I said.

"Same here," Ed replied.

"You fellows are both lucky," Dick answered.

"How do you figure that?" I asked. "You're the guy who killed the snowshoe."

"And missed the other one," Ed chimed in loudly from his seat in the back of the car.

"Well, I figure it's going to cost me forty bucks to get it mounted," Dick replied.

Ed and I almost responded in unison, "How do you know it'll cost you forty bucks?"

"Last night I called a taxidermist and told him I was going to hunt snowshoes today," Dick answered. "I asked how much he'd charge to mount one."

"Man, that's what's known as the power of positive thinking," Ed said.

"Say, Dick, what do you do the night before bear season?" I asked, my tone deliberately innocent.

"I never went bear hunting. Maybe I'll try it this year. I'll bet that taxidermist will give me a deal if I have this snowshoe and a bear rug both done there."

"Just be quiet and drive," I said.

Give **Game News** to a friend



WHEN THE YOUNG MEN neared the old sawmill, they had a very pleasant surprise. Plain as day, there were six sets of tracks.

Back In the May, 1973, GAME NEWS, Bob Latimer Had an Article Called "Deer Tracks," Which Caused a Lot of Chuckles Among Readers. Here's a Followup From Another Old-Timer . . .

More Deer Tracks

By W. W. Britton

WORLD WAR I was over. The deer population in Franklin County, which up to that time was minute in the North Mountains, was increasing by leaps and bounds. Large lumbering operations were being carried on in this area. Horses and mules were used to bring the logs to the mills. On what is now State Game Lands 76, a shed had been constructed to house these beasts of burden. Corn, oats and hay made up their bill of fare. After the sawmill had been moved out, the shed was left standing. Over the years, mice and rats had shared the corn and oats. Some damage was caused by spillage and the rest by small holes chewed in the grain sacks by the rodents.

After deer season closed, several young fellows from Upper Strasburg decided to walk over into Horse Valley one Sunday morning to look for deer tracks in the snow. When they neared the old sawmill setting, they had a very pleasant surprise. Plain as day, there were six sets of tracks. Hoping to see the animals, they continued to follow the tracks which,

believe it or not, led to and from the shed where the horses and mules had been housed. The door to this building was off, which made entrance very easy. It was noticed that the animals had pawed around to get what was left of the oats and corn.

One of the group had a bright idea, which he conveyed to his fellows: he, being a carpenter by trade, would make a trap-door, using a "figure-4" to trip it after the animals were inside. They would place some fresh corn as bait.

Pretty Clever

These fellows were pretty clever, and took everything into consideration. A farmer by the name of Dan Rosenberry lived across the Conodoguinet Creek, and they didn't want to do any pounding or hammering in their operation which might attract his attention. Therefore they took measurements of the opening by using green branches cut from a nearby bush.

The following week found the group preparing the necessary contrivances. On Saturday, they loaded the equipment onto a hand-pulled bobsled, which on their return could be used to ride down the mountain to Upper Strasburg. A small quantity of shelled corn was placed in the shed after the rigging had been put in place. When the set-up was completed, the men stood by and complimented each other on their handiwork. (Much the same, I assume, as King Solomon's workmen had done when the temple had been finished.)

Fresh tracks in the snow indicated that the deer were coming daily or nightly to search for food in the old shed. The next day would be one to be remembered, they hoped. Departing, they headed up the mountain road. At the top of the mountain, they all sat down on the bobsled and in less than five minutes were at the outskirts of the town.

The following day they would use the sled to ride down the Horse Valley side, and do the same on the front side when returning home. Walking up the front side that morning, one of the group stopped and said, "Suppose we catch the deer, what will we do with them?" This was something that had not been thought about, much less discussed between them.

"We could all wind up in jail," one said slowly. None of the group had ever been arrested for any wrongdoing, and none wanted to be. After awhile, another one said, "I'll tell you what we'll do. We'll look 'em over and turn 'em loose." To which all agreed.

The ride down the west side on the bobsled was exhilarating and fast. They hid the sled in the brush just off the road and began the last few hundred yards on foot at a quickened pace. The new growth of saplings and brush, which had sprung up due to sawmilling operations, impeded their progress somewhat, but all eyes were focused in the direction of the shed. When it finally came into view, one of them said, "The door is down. We've got 'em!"

He was correct. They had 'em. All six of 'em. Peering through the wide cracks between the rough board siding, they saw 'em. When all had witnessed the catch, they all turned away from the shed and began to laugh. They all laughed until they almost rolled on the ground.

They had six of Dan Rosenberry's hogs.



THE RING-NECKED PHEASANT IS one of the most popular gamebirds in the United States. An import from Asia in the 1880s, its availability throughout much of this country was made possible by hunter license money.

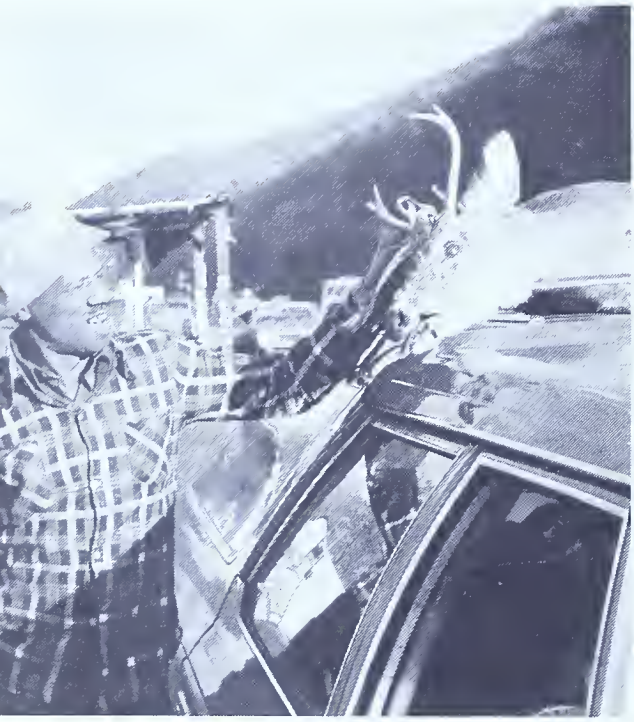
Social and Ethical Considerations in Conservation

To the Anti-Hunter

By Robert F. LeResche, Ph.D.
Alaska Department of Fish & Game

YOU, THE ANTI-HUNTER, are a new phenomenon: new in American history and new in the evolutionary history of mankind. According to studies you tend to be more educated, more wealthy and more urban, and to include a higher proportion of women than do hunters. You have been very successful, in an increasingly urbanized environment, in achieving your goals over the past several years. You have made important contributions to the welfare of rare and endangered species, and have forced the hunter to undertake a re-examination of his behavior. You have often inserted humanity where only demography previously ruled.

It may surprise you to hear me say that you are in danger of losing what you strive to protect. Extremism has a way of catching up to one in the fickle public arena. Flushed with success, you have often become unreasonable and oppressive, and have forgotten human social rights and ethical constraints in your rush to protect the rights of other animals. At your worst, you are blindly intent on eliminating an important aspect of human diversity, and foreclosing any future for an important and long-satisfying human experience. You would prohibit something that is culturally and genetically based, and is emotionally fulfilling to many of your fellow human beings. You would prohibit something that is ecologically



CHARLES "HUSS" JOHNSON of Columbia bagged this Cameron Co. 6-point. True hunting is an integral part of evolved mankind, and the closer man returns to the natural world, the more he returns to hunting.

sound, and that most ecosystems have evolved alongside. You would, in the special case of the North, destroy a multitude of cultures and force hundreds of thousands of human beings presently living with the natural world of renewable resources into "cash economies." The life-styles you would force them into are incredibly profligate in their use of energy and non-renewable resources and could ultimately result in the destruction of our last great wild lands.

Most important, by focusing your considerable energies against fellow conservationists—hunters who share your perception of man's relationship to nature—you give free reign to others who don't give a damn whether wildlife survives another day. As Dr. Raymond Dasmann put it: ". . . The nature lover who can weep over baby whales while turning a blind eye to other marine utilization schemes that would destroy the food supply of all whales, certainly lacks understanding. Those who would protect all animals from hunters, but leave them to starve on a depleted habitat, have some strange kink in their humanitarianism. Those who would eat meat, but oppose all killing of animals, live at best in a peculiarly sheltered world." By misdirecting your efforts against those who in reality share your most basic concerns, you are in danger of losing it all.

As a thoughtful conservationist you should consider several suggestions before expending your energies to fight against all hunting:

First—Learn more about ecology. Learn that the real danger to ecosystems is not limited killing of consumer species, but rather wholesale destruction of substrate and producing species and injection of pollutants. Learn the principles of compensation. Learn that once an ecosystem is altered by man (and few remain unaltered), further manipulation is often necessary to preserve it. And learn more of the "natural" lives of wild animals and the conditions they have evolved to cope with. When you understand these things, I predict that you will have a much deeper love of natural things than you have now, and will be able to relate to them more than you ever dreamed. Love based on knowledge transcends any emotional attachment based on fantasy and misinformation.

Second—Learn more of human evolution and of man's primordial relationships to natural systems. You will discover that man has long been at or near the top of the food chain, and that he has long been intertwined with many prey species as a predator. You will discover how many of man's behavioral and cultural attributes—attributes as basic as family structure—evolved because of his hunting

heritage. You will learn that hunter-gatherer societies are the least destructive of natural systems, and that agricultural societies have been responsible for atrocious environmental degradations. You will learn that hunting man has always felt the greatest reverence for wild things, and has always mourned their disappearance (and strived for their protection) more than has urban man. Most important, you will discover that true hunting is not an aberration, but is an integral part of evolved mankind. The closer man returns to the natural world, the more he returns to hunting.

Third—Learn to distinguish between hunters, hooligans, and exploiters. The true hunter sincerely enjoys what he does and finds himself fulfilled and brought closer to nature by it. He could no more face a world without wildlife than he could face one without oxygen. He cherishes the intimacy and respect inherent in the hunter-hunted relationship, and understands wild things better than anyone else. He is no more a bloodthirsty "kook" than you are. These things distinguish the true hunter, and he shares your disgust for those who kill and destroy thoughtlessly, wastefully or cruelly.

Fourth—Learn what hunters have done for wildlife. It may be a difficult thing to face, but you are a Johnny-come-lately to conservation; the hunter was talking about ecology, pollution, habitat destruction, and the "balance of nature" before you ever heard the words. Hunters' dollars have paid for the research that is almost all we know about wildlife.

Hunters' dollars have paid for preserving millions of acres of land that support millions of wild animals. It is frightening to imagine what would be left of wild systems on the earth had not hunters fought for decades to preserve them when nobody else cared. These are facts that you cannot ignore.

Fifth—Recognize the fact that subsistence economies will continue to be the most ecologically sane means of support for people living in the North. This support comes at no cost to the ecosystems it derives from and allows one of the most satisfying life styles left on earth. To preserve the future opportunity for such life styles is the best way to preserve our last great natural systems on the North American continent and the best way to insure that your children might one day have the opportunity to understand wild things as only the self-sufficient subsistence user can.

Grim Alternative

The alternative is grim—an increased load on our energy/resource wasteful economy, an immense area of wild land supporting ecosystems deprived of a natural predator and, in turn, burdened by thousands of industrial, consumption-oriented visitors, and another deeply satisfying dimension of human life forever lost.

All these suggestions boil down to this: You owe it to your fellow human beings to consider each case on its merits, to really consider all the ramifications of hunting or the abolition of hunting and to never summarily prohibit something you do not understand. Most importantly, put your efforts where they will do the most good—towards stopping the developer, the energy salesman, the polluter and their ilk. Don't squander them on your closest ally, the hunter.

Dr. Robert LeResche is a wildlife biologist with the Alaska Department of Fish & Game. This is the second of two articles excerpted from a speech he gave at the annual meeting of the National Wildlife Federation in Denver, Colo.

The Day of the Biggest Bear

By Chuck Fergus
PGC Information Writer



633-Pound Black Bear Taken By Norman Coykendall In Pike County on December 4, 1923 . . .

ON THE FOURTH day of December, 1923, the biggest bear ever taken in Pennsylvania fell in Pike County.

More than fifty years have passed since that day; Norman Coykendall of Milford, who killed the bear, is now dead. Ed Orben, Otto Myer and Ed Kline, also of Milford, and C. S. Orben of Newark, N.J., were hunting with Coykendall that day, and they also are gone. Everett Orben is the only surviving member of Coykendall's hunting party.

Mr. Orben lives in the country outside Milford and is caretaker at Milford Reservation, 1700 acres of land owned by the Prudential Insurance Company. At 82, his mind is still sharp. He still tells the story of the biggest bear but admits that the passage of half a century clouds his memory and the event once sharp and bright has dimmed somewhat in his mind.

Mr. Orben remembers much of what happened that day, although he was not with Coykendall when the bear was actually shot. But with a little background information from Mr. Orben we can guess how it happened. There are certain things, events, sights, smells, sounds—and feelings—that all men experience while engaged in the hunt, for the hunt is an equalizer.

It was cold, that last hour before dawn on December 4. Light washed the eastern horizon and only the brightest stars still glinted in the clear sky. The fourth day of buck season was beginning as the five men left the Orben farm in Pike County's Dingman Township and headed north along Van Auken Road. They intended to hunt deer, although bear season was also open.

Van Auken Road was a typical woods road, a trace through the hilly, brushy terrain five miles west of the Pennsylvania-New Jersey border. Back at the Orben farmhouse, they had decided that Coykendall and Everett Orben would be the lucky ones to post on the road where it crested Van Auken ridge. The others would drive the woods toward the two after allowing them time to get set on the ridge.

Hunters Rarely Speak

The group split up. Coykendall and Orben walked up the road, their boots occasionally scuffing on the hard-frosted ground. They paused and loaded their guns in silence. It was a little past 7 o'clock and hunters rarely speak much at this time of day. They sometimes say "Good luck" or mumble parting words, but most thoughts remain unspoken. Readers who are hunters will understand; those who don't hunt must think of the feeling of anticipation they have when embarking on a long-awaited trip before dawn, as it is a state of mind much like this that affects one before the hunt.

Orben stopped on the crest of the ridge. Coykendall continued along the road, following the hard path as it bent gently to his right. A hundred yards more and he stopped. He would post here.

The sun had come up and he would have it at his back. That was good,

NORMAN COYKENDALL, of Milford, is dwarfed by his black bear trophy. The bear weighed 588 pounds field dressed and is estimated to have weighed 633 pounds when living. Recently, members of the Pike Co. Federation of Sportsmen's Clubs donated a head mount of the animal to the Game Commission.

he thought, because the deer would be looking into it, making it harder for them to see him. There was no wind to drive his scent down the ridge. The brisk walk had warmed him and he breathed deeply, feeling the raw air freeze the hairs inside his nostrils, chill his windpipe and fill his lungs. The woods smell came through the cold.

In his mind's eye, a buck came through that little clearing past the gnarled chestunt oak, just so, sneaking along. A big 8-point he would be, with long, curving tines that glinted in the rosy morning light. Coykendall raised the gun and lined up the sights. If it happened, if the buck came through there, well, he would get him. If only there was an inch of snow on the ground, he thought. A deer would stand out against the snow.

He waited fifteen minutes on the dirt road, his eyes searching the trees for movement. The drive would start before long. A chickadee bounced in the branches of a sapling, and he could hear a woodpecker drumming far off in the woods.

A Noise Behind Him

Then he heard a noise behind him, away from the drive. Nothing should be coming from that direction, he thought, but the noise approached like a whirlwind through the brushy timber and over the crisp, dry leaves. He turned slowly, his gaze passing across the bright sun rising in the east. There in the road, not twenty feet away, was the dark bulk of it. His eyes, half-closed against the sun, sought to take in the whole scene.

Suddenly the bulk rose and kept on rising, still rising until it seemed to fill the road. It was a bear, a monstrous bear, black against the sky. Standing up on its back legs like a huge man, it sniffed at the air and tried to identify the movement it had seen.

Coykendall raised his rifle as if in slow motion. *Boom!* The shot rolled downhill and bounced off the far ridge. *Shuck.* The cartridge case was tromboned out of the Remington by trembling hands and weak arms. *Boom, shuck. Boom, shuck, boom, shuck, boom, shuck, boom, shuck. Click, shuck. Click.* The gun was empty, the bear was gone.

Everett Orben heard the shots and the ringing of Coykendall's voice.

"Come here quick! A big bear, here's a great big bear!"

He ran toward his friend and found Coykendall pacing back and forth on the road.

"I hit him, Ev, I hit him," Coykendall said.

Orben scanned the road for a blood trail. He saw where the bear's hind claws had torn long furrows in the road, ripping out small stones and scattering dirt. It had run toward a bank along the side of the road and headed back in the direction it had first come from. Orben found some fat and a little blood up over the bank. He decided to go back to the farmhouse and get his dog, which was "pretty good on coons." Neither man was too anxious to strike out immediately on the trail of a wounded bear.

Fifteen minutes later, they had the dog on the bear's spoor. The dog was a mixture of many breeds but proved himself to have a nose, as he trailed the bear about 250 yards. Here the two men pulled up short. The bear lay ahead, straddling a large log. It did not move.

The bear had died trying to cross the windfall. With shaking hands, Orben and Coykendall field-dressed the animal. They found that only one bullet had hit the bear, but it had entered behind a front leg and penetrated the lungs. The two men waited



NORTHEAST DIVISION Supervisor N. J. Molski accepts head mount of the record bear. Head had been in possession of the late Albert Schneider, who left it to the Game Commission. From left to right are Art Garris, Supervisor Molski, George Frank and Henry Naujoks. Garris, Frank and Naujoks are officers of the Pike Co. Federation of Sportsmen's Clubs.

until their hunting partners finished their drive and stepped from the woods onto Van Auken Road. Orben shouted and the drivers came over to the great bear, their eyes bugging when they saw the animal. Bear season ran concurrently with deer season in 1923, but no one had expected to bag a bear, much less one this size.

The men cut a stout pole about 12 feet long and tied the bear to it. With three men on each end of the pole, they managed to haul the great animal out to the road and somehow got it into the back seat of Everett Orben's Model T Ford. The car's springs squeaked and settled and both rear doors had to be left propped open, but the men brought the trophy down off Van Auken Ridge in the overloaded car.

Two beam scales were needed to weigh the bear; one went to 500 and the other to 88, for a total weight of 588 pounds, hog-dressed. A close estimate of the bear's live-weight—its weight before it was field-dressed—would be 633 pounds. The huge animal was hung in Milford, and as Mr. Orben remembers, "The whole town turned out to see that bear."

Just about the whole town had meat from the bear, too, Mr. Orben says. A 600-pound animal goes a long way and Coykendall was generous with his prize. At the time, Dan McPeek, now a retired Pike County game protector, was an 11-year-old boy living in Matamoras, about eight miles from Milford. He remembers the stir created by the big bear but didn't get to see the animal. Back then, eight miles was considered a long distance.

Eighteen times a thousand days have come and gone since the day of the biggest bear.

The woods on Van Auken Ridge have matured. Tall trees and a more open forest floor have replaced the low, thick browse that covered Pike County after heavy logging around the turn of the century. This natural

forest succession has given rise to a change in wildlife. Grouse, rabbits and snowshoe hares, almost overabundant in the '20s, are no longer so plentiful. Today there are many more deer. Wild turkeys and beaver abound in 1975, even though they were rarely seen in the northeast 50 years ago.

Now there is a recreation boom in Pike County, and the wild lands are dwindling. Within the last decade, developers have bought large amounts of land, subdivided it and sold it for summer homes and retreats. Van Auken Road has been widened and scores of new roads are carved through the woods. Many residents worry about the plastic short-order "shoppes," the resorts, vacation communities and new highways burgeoning in the county.

The Pennsylvania Game Commission is concerned about continual inroads on wild land, too. There are fewer black bears in the state today than when Coykendall shot his trophy, and a major reason is because there is less of the wild land which the big animals prefer. The Game Commission is conducting research on the black bear, its reproduction, range movements, and the age structure of its population. The Commission will try to use this information to chart a management course for this superb animal.

A bigger bear than the 633-pound giant shot by Norman Coykendall in 1923 may never again stalk the Pennsylvania wilds. But the Game Commission is dedicated to making sure that there will always be bears in our state.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Complete Book of Trailering, produced by Lyle Kenyon Engel, Arco Publishing Co., 219 Park Ave. South, New York City 10003, 192 pp., paperbound, $2.95. A vast amount of information on trailers, the cars that pull them, hitches, tires, brakes, winter storage, what have you. Could be invaluable for anyone new to camping trailers.

Don't Blame the Fish, by Bob Warner, Winchester Press, 460 Park Ave., New York City 10022, 210 pp., $8.95. Doubtless the review copy was intended for PENNSYLVANIA ANGLER, but it somehow ended up in the GAME NEWS office and we kept it . . . maybe because one story is entitled "Big Game on a Fly," but more likely because the whole book is close to hilarious. Really readable, even if you don't fish.

Training the Versatile Gun Dog, by Jerome and Alyson Knap, Charles Scribner's Sons, 597 Fifth Ave., New York City 10017, 185 pp., $7.95. Tells why and how "pointing retrievers" such as the German shorthair, Brittany spaniel, vizsla, weimeraner and other European hunting dogs were developed, how to train them and how to hunt with them. The Knaps, a husband and wife team of wide hunting and field trial experience, know their subject and present it well.

Tips on Better Reloading, a small booklet listing reloading recommendations for 12-ga. RXP trap and skeet loads in both 2¾ and 3 dram powder equivalents, for the new RXP 20-ga. skeet loads, and for Remington-Peters All American 28-ga. and 410 bore skeet loads, is now available in an updated version. Free copies may be obtained by writing to Reloading Booklet, Remington Arms Co., Inc., Bridgeport, Conn. 06602.

Topographic Maps—Hunting Guides

By Eugene R. Slatick

THIS IS a good time to become familiar with topographic maps or to renew your knowledge of them. They are useful outdoor guides, particularly if you plan to leave the well-trodden trails and head into the woods. They are almost essential for hunters who hope to harvest a deer from a new hunting area. Deer hunters are supposed to rank among the prime candidates for getting lost, whether it is just a matter of losing one's way temporarily or long enough to cause some concern. Used with a compass, a topographic map will give you an idea of the lay of the land, enabling you to feel more at home in a new area. You will be able to spend more time hunting instead of wondering—perhaps worrying—about directions.

The first thing to do is to find out which topographic maps cover the area you want to know about. Write to the Map Information Office, U.S. Geological Survey, Washington, D.C. 20242, and ask for their index to the topographic maps of Pennsylvania. Also request their free booklet describing topographic maps and symbols. The maps are called quadrangles and are named after a town or some other prominent feature in the area.

Topographic maps come in three series: 7½-minute, 15-minute, and the 1:250,000. The first two currently cost 75¢ each, the last, $1. The 7½-minute quadrangle shows the most detail and will be the most useful. It has a scale of 1:24,000, which means that one inch on the map equals 24,000 inches, or 2000 feet, on the ground. It covers 7½ minutes of both longitude and latitude, and includes an area about 6¾ by 8¾ miles. The map size is 22 by 27 inches. The 15-minute quadrangle has a scale of 1:62,500, which means that one inch equals about a mile. It covers an area about 13½ by 17½ miles, and is 17 by 21 inches in size. The 1:250,000 map covers a large area, about 70 by 110 miles, with an inch equaling about 4 miles. It is 22 by 34 inches in size. All the maps have a graphic, ruler-like scale to help you figure distances.



SOME TOPO MAPS are available in a shaded-relief edition. As shown on this map (part of the Pottsville quadrangle), the shading emphasizes terrain outlined by contour lines.

Most of Pennsylvania is covered by the 7½-minute quadrangles. A few areas are covered only by the 15-minute quadrangles. For many areas

you can get both types of maps. The entire state is covered by the 1:250,000 maps; you won't find them very helpful for detail, but they are good for giving you a bird's-eye view of a large area.

The maps are printed so that the side borders run north-south and the top and bottom borders run east-west. The 7½- and 15-minute quadrangles have a diagram that points to true north as well as magnetic north, which is the north shown by a compass. On some maps the diagram has three prongs. The one with a star points to true north; the one with half an arrowhead points to magnetic north; and the third has the letters "GN," which means "grid north" and is used by cartographers.

In Pennsylvania, magnetic north is west of true north. This means that your compass points a little too far to the west. The difference, called the magnetic declination, ranges from about 11° in the northeastern part of the State to less than 5° in the southwestern corner.

Can Be Adjusted

Many compasses can be adjusted to account for the magnetic declination. If there are enough landmarks in an arca, you don't have to be overly concerned about it. Besides, most hunters meander through thc woods; they seldom plot a direct course. But suppose wou want to plot a precise orientation to a certain place. How far off would you be if you didn't allow for the magnetic declination? The difference is 50 feet per degree over 3000 feet, or about 88 feet per degree over a mile. So in the northeastern part of the state you would be more than 900 feet too far west after traveling a mile. By comparison, in the southwestern part you would be less than 500 feet off course.

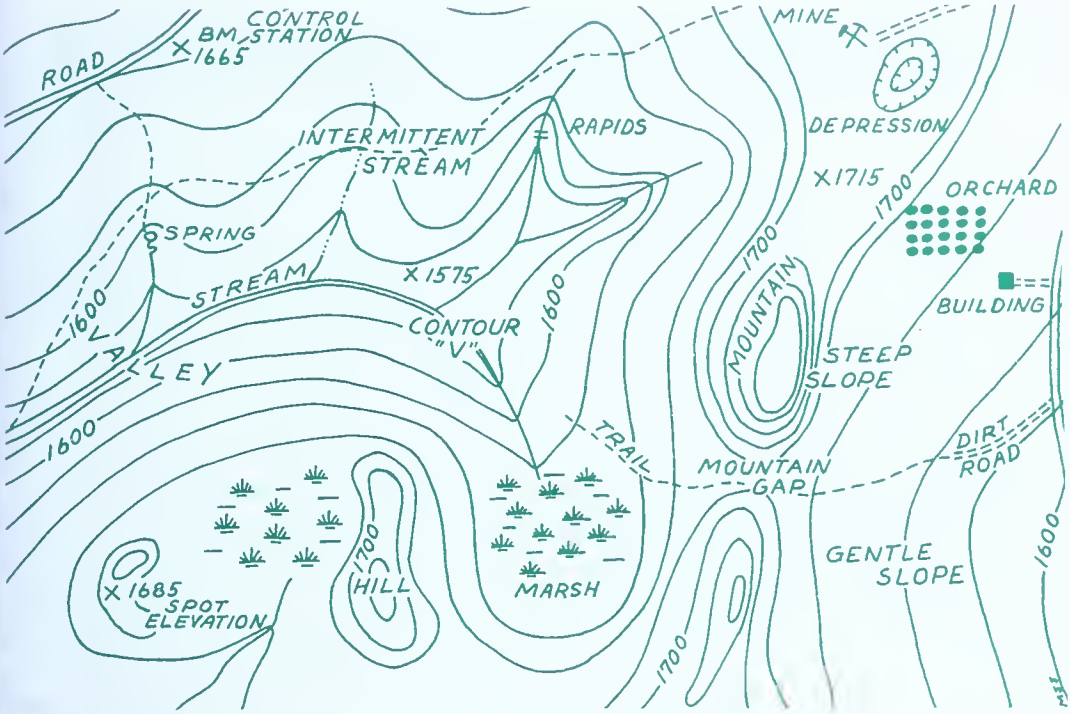
Contour lines are what make the topographic map so useful. A contour line is an imaginary line running horizontally through the ground that represents a certain elevation above sea level. Each contour line stays at its particular elevation no matter how the land is shaped. If you could walk on a contour line you would follow a level trail, though it might wander over the landscape.

Contour lines are shown only for certain elevations. The interval between them, called the contour interval, depends on the scale of the map as well as the relief of the terrain. It might be five feet in a very flat region, or 100 feet or more in mountainous country. The contour interval on the maps you will be using in Pennsylvania will be 20 or 40 feet. The elevations represented by the contour lines are given on every fifth contour line, called an index contour, which is printed a little darker than the others. For a 20-foot interval, the index contour appears every 100 feet, and for a 40-foot interval every 200 feet.

You can estimate the elevation between contour lines by a little extrapolation. For example, a point halfway between the 100- and 120-foot contour lines will be about 110 feet. If it were a little closer to the 120-foot contour line, the point would be perhaps 115 feet.

You will notice that numbers are printed on various parts of the map. These are also elevations. They range from spot elevations (shown by a brown "X") and elevations at some road forks to precise control stations (shown with a black "X" or triangle).

Taken all together, the contour lines reflect the character of the terrain. Closed circles or loops indicate the tops of hills or mountains. Contour lines that are close together mean that the land is steep, whereas those that are widely spaced reveal that the



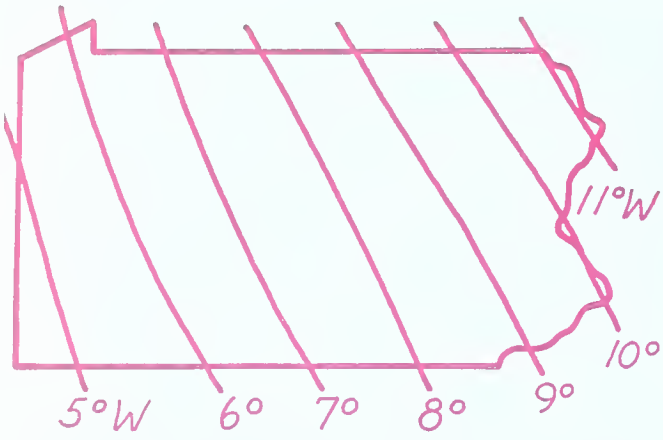
COMPOSITE MAP SHOWS many common terrain features. High point on mountain and streams are among the several features that a hunter could use to determine his location.

terrain is gently sloping. Closed circles or loops that have spines pointing inward indicate depressions.

You can use contour lines to determine the slope of the land. This might be a wise idea if you are not in good physical condition and the map shows what seems to be some rather steep hillsides. The steep slopes will stand out on the map because the contour lines will be close together. But you can get a better idea of the grade of a hillside by a little calculation. First, measure the distance from your starting point to your destination. Next count the contour lines across the same area to get the rise in elevation. Divide this by the distance and multiply by 100 to get the percent of grade. For example, if the distance is 1000 feet and the elevation rises 100 feet, then the slope is 10 percent, which is a moderate grade. If the hillside rose 100 feet over 400 feet, the grade would be 25 percent, which is steep. If you aren't sure what is "too steep" for you, estimate the grade of some slopes you have walked up. Then you will have a point of comparison.

Contour lines also indicate the direction from which a stream flows: the contour line points upstream in a "V" when it crosses the stream. This occurs because the stream cuts back into the land and the contour line has to swing back to stay at its particular elevation. The "V" becomes more of a "U" on a large stream, but it still points upstream.

By studying the contour lines and visualizing what they represent, you can pick out features worth remembering when you are outdoors. For example, if a mountain parallels the area you will be in, note its location. If it's on your right when you are entering an area, then it should be on your left when you leave. Or if an area has several hollows or small valleys that are similar, you might be able to find something distinctive



EARTH'S MAGNETIC FIELD causes a compass needle to point west of true north in Pennsylvania. This map shows the difference in magnetic declination across the state, from 11 degrees west in the northeast to 5 degrees in the southwestern corner.

about each one and then use that particular feature as a guide. Perhaps one will have a stream or a marsh; maybe one is oriented in a different direction than the others.

With topographic maps, you can plan your hunt so you have the morning or evening light in your favor. You might even go so far as to try to account for the local winds when you are stalking along a mountainside. When the sun strikes the mountainside in the morning and warms it, the air moves uphill, carrying whatever scent it picks up. In the late afternoon, when the mountainside cools off, the air current is downhill. Hunters sometimes forget to watch the wind; a deer doesn't.

Some of the older topographic maps may be a little out of date with regard to some manmade features, so check the date of the map. Houses may have been built or torn down after the map was printed. New roads may cross areas that were once relatively isolated. Some old dirt roads may not be usable today.

An easy way to learn to read a topographic map is to start with one of an area you already know. By seeing how familiar things are represented on the map, you will learn the principles of map reading faster than by simply reading instructions. You may discover some interesting things about an area you think you know well. The maps of a few areas of the state are available in a shaded-relief edition. They have contour lines as well as shaded areas; the combination makes the terrain stand out.

The time devoted to studying a topographic map will be well spent. Make notations on the map of anything you want to remember, such as the distance between certain points, important landmarks, and other distinctive features. You might want to have two maps of the same area—one to take with you, the other to leave with someone "just in case." In wet weather, you can fold a map and carry it in a transparent plastic bag.

A few basic rules worth remembering are: 1) take the map and compass with you; 2) know where you are on the map; 3) decide which way you want to go and note it on the map; 4) observe the terrain; 5) if you lose your way, stop and size up your situation; and 6) trust your compass (keep it away from metal when taking a reading). These are all common-sense guidelines that won't hamper your enjoyment of the hunt or the outdoors. They'll make you glad you went.

For Further Reading

"Be Expert with Map and Compass," by Bjorn Kjellstrom. Stackpole Co., Harrisburg, Pa. 17105, 1967.

"Survival in the Outdoors," by Byron Dalrymple. Outdoor Life—E. P. Dutton & Co., Inc., N.Y., 1972.

"Topographic Maps—Silent Guides for Outdoorsmen." U.S. Geological Survey, Washington, D.C. 20242. (Free pamphlet; contains information on mounting maps on cloth.)

Dan's 97-Pound Night in Fowler Hollow

By William A. Collins

COON HUNTING was one of my favorite sports, and in the fall of 1928 the season was well on its way and my faithful old dog Jack was failing fast. I knew he could not stand the steady grind of hunting nearly every night until the season ended. There were a number of wise old raccoons which gave Jack a very rough time, coons that knew all the tricks of their breed, and my dog did not have the stamina any more to stay with them.

I saw an ad in a hunting magazine from a kennel in Kentucky advertising a black-and-tan, fast, open trailer, ten days free trial, money promptly refunded if not satisfactory. I mailed the money at once and could hardly wait to get word that he was on his way, so I could show those wise old coons I wasn't beat just yet.

Time passed very slowly as I waited for a call from the Express office. Finally it came. I jumped in my Model T and headed for the train station. I don't know to this day how I stood the shock when I first saw him. He didn't look any more like a coon dog than I did, much less a black-and-tan. His color was sort of brownish-red, he had a face something like a bulldog—ears about three inches long that stood up sort of pointy-like—and the rest was something else! His name was Dan (it was printed on a piece of cardboard tacked on the crate).

When I got over my near-fainting spell I went a little closer and said "Hi, Dan," and gave him a little love pat on his head. He sure must have noticed the disappointed look I had on my face as he gave a little whine and looked at me as if to say, "*Please* take me home with you, I won't let you down."

So I took Dan along home with me and gave him some clean fresh water and a good meal, and his look of appreciation alone was worth the price I'd paid. Well, my heartbeat was getting back to normal and I began to feel real guilty about passing judgement on him before we really met.

The next couple of days he and I became real friends. In the evening after dark I lit my old lantern, put on my hunting coat, picked up my gun and flashlight to see if he might know anything about why he was there (besides to eat!). Well, let me tell you I didn't have to be an expert at reading sign language to know he was telling me he was a coon dog.

Fast As Light

I took him into the woods where I knew there were coon and when he scented one he would come to me, give a little whine and a playful jump, and leave like a bullet. He was as fast as light and quiet as a shadow; he would not bark until the coon was caught or treed.

This coon hunt I would like to share with you took place in a valley we call Fowler Hollow on the night of November 18 in the year I already mentioned. It was fairly warm, the sky overcast, and not a breeze anywhere. Dan was barking and begging me to get my things and take him to the woods, so I did. I unsnapped his chain, cranked up old Tin Lizzie and headed up the rutty road with Dan. He always rode with his two hind feet on the edge of the back seat and a front foot on each of my



OL' DAN DIDN'T LOOK any more like a coon dog than I did, but when I got over my near-fainting spell I went a little closer and gave him a love pat on the head.

shoulders. Once in awhile to show his affection he would whine in my ear and then lick the side of my face.

I stopped at a friend's house near the foot of the mountain and asked him if he would like to go coon hunting. "Well," he said, "If you don't stay out too late I will go with you."

My friend's name was Clyde Smith and he loved the woods as much as I did. Not knowing what was in store for us, naturally I said, "We won't stay out so late."

We started up over a small hill from his house that brought us to a little hollow between a small ridge and the mountain. We crossed the hill down into Fowler Hollow and had traveled a short distance when Dan gave a little whine and disappeared into the darkness.

I told Clyde to get ready to carry a coon. He gave a little chuckle and said, "Your dog is no doubt chasing some deer out of the valley." He no sooner made the remark when Dan began to bark treed off to our left at the base of a large gum tree. We had no trouble spotting an old ring-tail crouched in the fork of the tree. I handed Clyde the gun and told him to get the coon because it might be the only one he would get a chance to shoot at if Dan began chasing deer. Well, he knocked him down. When the coon hit the ground the dog was right there to see if he needed any more killing, but he never moved.

Then we went back down toward the trout stream where it wound its way between two small ridges, and here Dan took off again. I told Clyde we might as well rest a spell and see what happened. We no sooner got fixed real comfortable on a nice dry log when Dan began barking treed about a half-mile up the valley. This time things were not so easy as we could not see any eyes sparkling. I was elected to climb the tree, a large hemlock, searching each branch with my light as I went higher and higher. Near the top were two branches bent down and a large coon trying to conceal himself from sight. I backed

down out of the tree, shone my light on the coon and Clyde did a masterful job shooting him.

A short time later, Old Dan treed another coon, a big whopping one, and we had three to carry. At this point, we sat down to rest a spell. We decided we'd had a very good evening and started heading back toward my friend's house when Dan gave a little whine, pointed his nose toward the stars and took off like a comet up the side of the mountain. We couldn't believe it and sat back down and waited about 20 minutes until right near the top of the mountain sounded the chopping voice of Dan barking treed.

We had no intention of carrying those three large coons any farther away from home, so hung them on a small tree before climbing the rough side of the mountain. We finally came near the top and Dan seemed to change to two different positions. We found he had treed three coons, possibly a family. Two very large young ones were on one tree and a bigger one about 20 yards beyond on another. We had no trouble seeing the coons and soon had them in our possession. I listened to a little grumbling from my friend and a whole-hearted apology for the remarks he had made about my dog running deer.

Well, we finally found the coons we had left hanging on the tree at the foot of the mountain; that's when we realized we had a man-sized chore to get them back to Clyde's house. We were stumbling along on our back trail too tired to speak to each other when we discovered our kerosene lantern was getting dim and our batteries for the flashlight were almost through. I still had enough oil in the lantern, but the wick was too short to reach it. My friend had on a woolen shirt and he suggested we cut a strip off his shirttail and fasten it to the lantern wick with a small safety pin I was fortunate enough to have with me.

We were climbing the last rise out of the hollow when we both ran out of steam and curled up in the leaves to fall asleep. Dan curled up close beside me. I thought he was too tired to move. It was then near 2 a.m., but just before the break of day Dan woke us from our dreams by barking treed once more at the top of the grade. He had his seventh coon of the night perched on the fork of a high oak tree.

Our Last Shell

With the last shell we had in our possession, I brought him down. And with the last ounce of energy we could muster from our tired bodies, Clyde and I stumbled and slid down the steep hill to his house and my old Model T. (With my gun, lantern, and a total weight of 97 pounds of coon.) It was a night to remember, with a faithful dog which I have never seen equalled.

Dan treed many of those wise old coons for me that season, the ones my old dog Jack could not master, 23 to be exact. The largest one weighed 23½ pounds. I had dreams of another hunting season or more with my dog, listening to his chopchop voice barking treed back on those ridges, along the streams, down in the valley or along the mountain side, but fate stepped in and his life was snuffed out by a car. As he lay there, life slowly ebbing away, he raised his head to look at me. I could see through my tear-dimmed eyes that we had taken our last hunting trip together.

And when he took his last breath, he took with him part of my life and my desire to ever go coon hunting again. If there is such a place as a heaven for dogs, I am sure Dan will have a special place waiting for him.

And The Chickadees Will Come To You . . .

By David S. Bair



A PET CHICKADEE, wild and free, checks sunflower offering. Note tiny claws around the fingertip.

WE FEED BIRDS ear corn, sunflower seeds, bread crumbs, stale peanuts and beef suet. At our feeder we get chickadees, titmice, nuthatches, blue jays, woodpeckers, cardinals and finches. On some days juncos cover the ground. But of all the birds we see and feed, I want to tell you about the chickadee. We have actually gotten chickadees to eat out of our hands on a regular basis.

The way you do this is with patience and training (both for you and the bird). The first thing to do is to set up bird feeders. Spike ear corn on tree branches. This will attract the cardinals, jays, titmice and juncos. An old string mesh bag filled with beef suet will attract the woodpeckers and chickadees. A plastic milk jug filled with sunflower seeds and feeding holes brings in the chickadees and other small birds. When you set up your bird feeders, keep them natural; short branches cut from trees or brush make perfect landing perches for feeding birds. Put your bird feeder in a sheltered place out of the strong wind.

Let the birds get used to feeding on suflower seeds. Then one day refill the feeder with bread crumbs, not sunflower seeds. A chickadee looks on sunflower seeds the same way a child looks at an ice cream cone. So at feeding time you fill your hand full of sunflower seeds and offer the seeds to the chickadees. It's a waiting game. The chickadee lands on the feeder and looks you over. There's a whir of tiny wings and a chickadee lands on your fingertips. The chickadee pecks at a seed, grabs it and runs. You felt the tiny claws. You're in a state of shock. The bird weighed almost nothing. You can't believe that it landed, but it did; it's difficult to explain to anyone what happened. And when you tell your friends that chickadees will eat out of your hand they say, "Oh, sure."

If I can do this, you can, too. You don't have to do it exactly the same way. You can handfeed chickadees

near any established birdfeeder. The main idea is to establish a safe feeding station and keep it stocked. Then be patient and get the chickadees to eat out of your hand. Once you get them to eat *from* your hand, you can keep the bird feeder full at all times and your pets will still come to you.

The titmice and nuthatches will observe the extra special "free lunch" and talk to themselves about it. On a rare occasion, a titmouse will land on your hand. But the chickadee will come in to your hand every day. You'll find the chickadee will fly at your head or at a window or door to attract your attention. They will beat the air to a frenzy, holding in mid-air, telling you it's feeding time.

For friends that doubt your story, have your wife or children feed the chickadees. Take a photo of the chickadee eating out of their hand. They have to believe the photo.

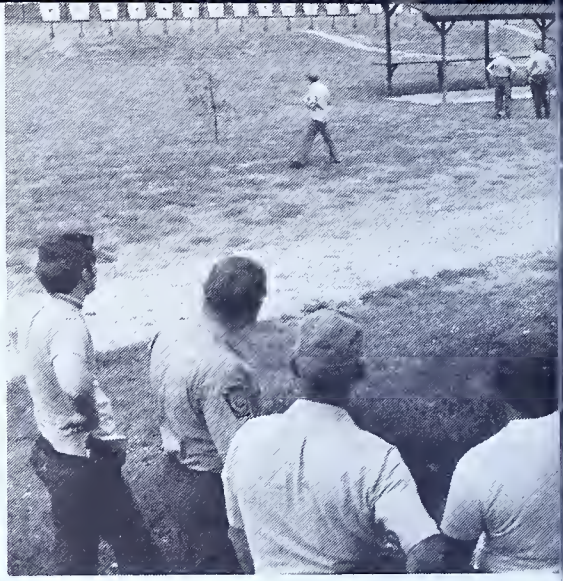
In summary, establish a feeding station for small birds. Feed them sunflower seeds. Substitute bread crumbs for sunflower seeds. Offer sunflower seeds in your outstretched hand at feeding time. Stand still and be patient. And the chickadees will come to you.

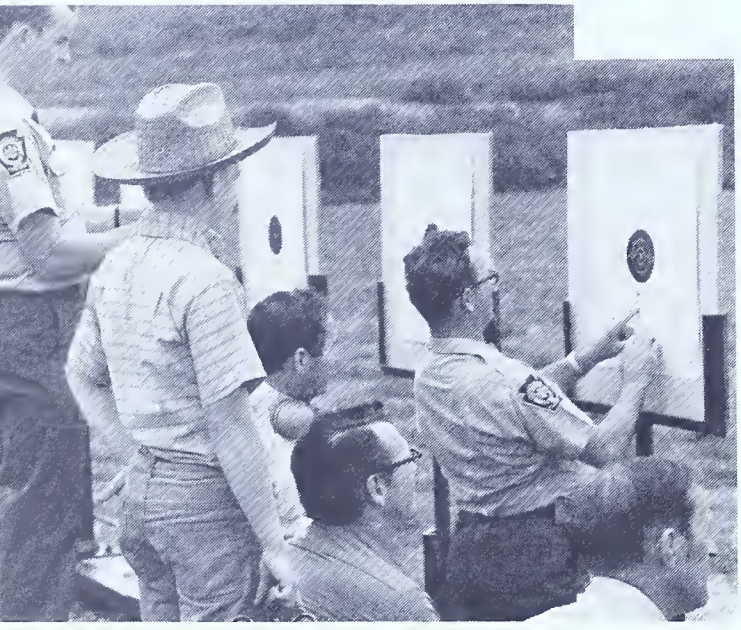
Book Review . . .

Keith, an Autobiography

We have many good gunwriters in this country and a few great ones. But if there were ever a contest to name our most colorful one, Elmer Keith would win hands down. Who isn't turned on by that bushy-eyebrowed, big-sombreroed cowpoke with the sixgun on his hip—that famous 44 Magnum that he, personally, was responsible for the development of? Even Jack O'Connor and Warren Page would vote for him. There's only one Ol' Elmer. It's doubtful if the shooting fraternity could take another! Now 75, Keith has been writing gun stuff for half a century. A lot of words have come out of his old typer, and a high percentage of them have been the kind to raise hackles and bring screams of outrage. Elmer doesn't care. He's been calling shots the way he sees them all his life and he ain't gonna change now. Many of you have read his earlier books—**Sixguns, Shotguns, Rifles for Big Game** and a handful of others—and the hundreds of articles he's turned out for "American Rifleman," "Guns," "Guns & Ammo" and other magazines. Often tucked into these were hints of his personal life that piqued our interest, made us want to know more about him. Well, here are the answers to all the questions. This is the story of a truly courageous kid from Missouri (wait'll you read the story of the rooming house fire and its aftermath!) who grew up on the frontiers of Montana and Idaho. A friend of Civil War veterans, Indian fighters, lawmen and gunfighters, he became a bronc stomper and then a rancher, but gave this up because it interfered with his shooting; then a big game guide and internationally recognized hunter and writer. And maybe—just maybe—he himself was the best gun handler of them all. (**Keith, an Autobiography,** by Elmer Keith, Winchester Press, 460 Park Ave., New York City 10022, 381 pp., illus., $10. Autographed copies available from the author, Box 1072, Salmon, Idaho 83467, $11.)







Deputy H

PENNSYLVANIA'S I
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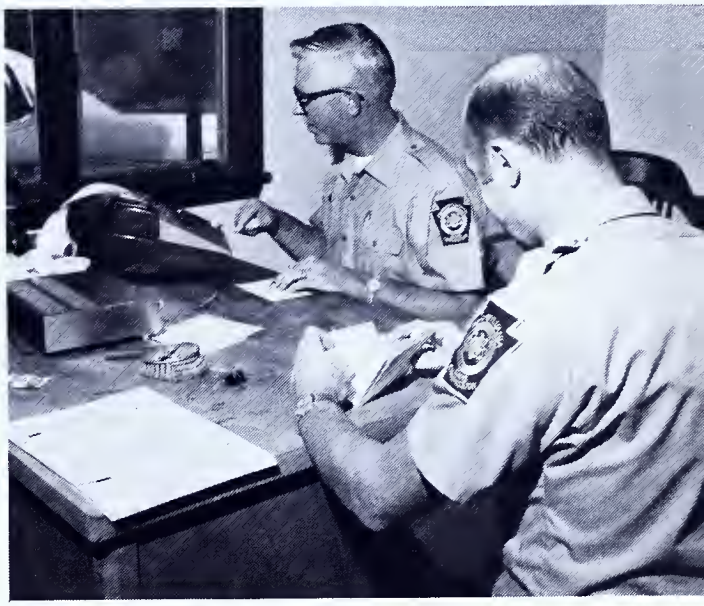




gun Match

ame Protectors fired their Scotia Range in Centre 1974. Both district team ed on the 25-yard bullseye 30 shots, 10 shots each of ring and record compila- d personnel of the Game l day for the event, and e accompanied by their

By Jerry Wendt
Photos by Joe Osman



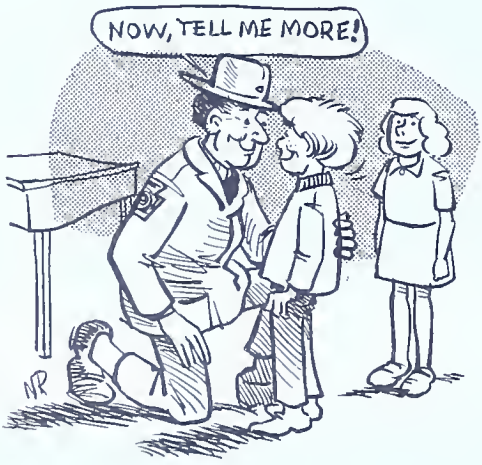


EARL GEESAMAN, Chief of Law Enforcement, and N. J. Molski, NE Division Supervisor, left, check squadding. Right, DGP Joe Wiker's 1st place team receives trophy from Executive Director Glenn Bowers. Centre Co. team made up of T. Weaver, W. Sipple (high gun), R. Shevchik, W. Evans and D. Roland scored a 992.

FIELD NOTES

Real Outdoorsman

While patrolling Clarks Valley this past hunting season, I was flagged down by a "hunter" who asked, "Do wild turkeys fly?" I guess my stunned look prompted him to continue. "I'm serious. When I walked by that brush I heard something cackle and fly away." He seemed taken aback when I informed him that wild turkeys do indeed fly, but that he had put out pheasants instead of turkeys.—Land Manager K. M. Zinn, Dauphin.



"What's Your Name, Son?"

LAWRENCE COUNTY – A while back I gave a program to a group of elementary school students. After I talked to the kids about hunting seasons and bag limits, one little boy proudly exclaimed that his daddy knows a man who shot a cow and it wasn't even cow season.—District Game Protector W. D. Shultz, New Castle.

Good New Days

NORTHUMBERLAND COUNTY —While making contacts with farmers on Farm Game Project No. 90, I spoke with a son of one of the cooperators. This young man (in his 20s) told me that as a boy he had hunted his father's farm for rabbits and only remembers shooting one. A couple of years ago, the Game Commission's Food & Cover Corps made a woodlot border cutting on the farm. Now he tells me it's nothing to go along the strip and kick out rabbits—another testimony to the value of woodlot border cuttting. —District Game Protector C. E. Laubach, Elysburg.

Headhunter

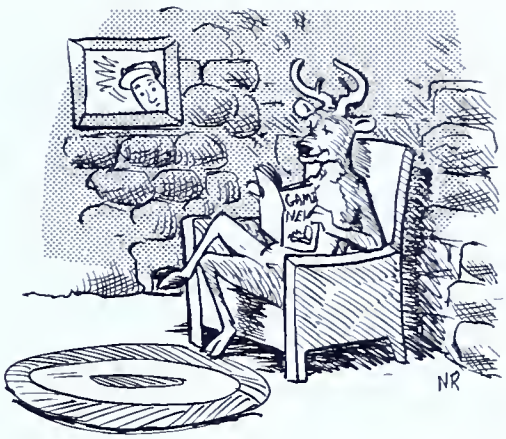
WASHINGTON COUNTY—I've had some interesting calls from housewives looking for gifts for their hunter husbands. The most intriguing call was from a woman who wanted to know where she could buy a ceramic bust of a "game warden." She said she got the idea from a newspaper cartoon and decided to buy one and hang it on the wall over her husband's gun cabinet. Underneath this bust she was going to put the receipt that I had given her husband when he paid a fine for hunting in a safety zone. I'm just glad she was looking for an artificial model instead of the real thing.—District Game Protector J. M. Kazakavage, Washington.

Giant Contribution

CAMERON COUNTY—Game protectors receive thousands of calls, most of them asking for something—help, information or free literature. Once in a long while we are rewarded when we least expect it by someone who shows that they want to help. Last November our Food & Cover Corps men found a sick elk calf on State Game Lands 14. We took it to our equipment building in Emporium and decided to try to doctor it back to good health. We knew the best thing would be to send for a veterinarian, but this would cost money and we would have to pay for it ourselves. This could cost a lot because the closest vet was at Coudersport, 40 miles away. Anyway, I placed a call to Dr. William Mitchell and in a short time he came to Emporium. Over a period of a week he made the 80-mile round trip three times, gave a number of shots to the elk, along with other drugs and food, and made several long distance calls to me and to Penn State about the calf. He refused any pay. Unfortunately, we lost the elk but all of us gained a lot of respect for Dr. Mitchell and the information and help we gained from this experience may very well help save a sick elk in the future.—District Game Protector N. L. Erickson, Emporium.

Thanks for Getting Involved

NORTHAMPTON COUNTY—Last year, I was gratified by much cooperation from hunters and non-hunters in investigating game law violations. Many people got involved and I really appreciate it.—District Game Protector R. W. Anderson, Nazareth.



Highway Hideout

It amazes me the way some deer adapt to civilization. While on patrol along Route 22, my son Eric and I noticed a buck running toward the road. We stopped and the deer came almost to the road but then went into an old abandoned spring house nearby. I sent Eric down and he flushed the deer out of the spring house and back over the hill. I wonder where this buck hid out last deer season?—CIA J. Badger, Ligonier.

Lucky Move

CENTRE COUNTY — All hunters know the importance of sounds and noises in locating game. Many times crackling leaves or snapping twigs are the first indication that game is nearby. While hunting turkeys in Clinton County, Bob Divany of State College heard a crackling noise behind him. Thinking sure it was a turkey, Bob whirled around just in time to see the limb of an oak tree hit the ground where he had just been. It's a good thing ol' Bob wasn't moving a little bit slower.—District Game Protector G. F. Mock, Coburn.



Gold Cap

BEDFORD COUNTY — An Everett trapper, Jack Feight, caught a muskrat this season with a fired 22 long rifle case firmly wedged over its lower front teeth. The rim and base of the case were worn about half way through. The rat's upper front teeth were only a quarter of their normal length, having been ground down by contact against the brass case. Except for the teeth, the rat was healthy and prime. I've seen or heard of woodchucks, skunks and cats with tin cans over their heads, but this is the first I've heard of a muskrat with gold teeth.—District Game Protector T. C. Barney, Everett.

Anti-Hunting Ammo

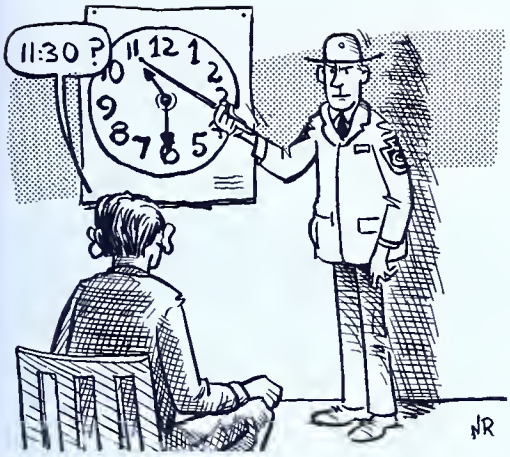
ERIE COUNTY — With so many persons wanting to outlaw hunting these days, it seems that every hunter should be on his good behavior. Unfortunately, they're not. The very thing we wanted to avoid happened in my district during deer season. I got a call that some deer had been shot and left to rot. Upon investigating, I found four does. They were in the middle of an open field and all lay within 200 feet of each other. District Game Protector R. W. Meyer, Fairview.

An Open Letter

MERCER COUNTY — Mr. Sportsman: You say you care about your sport, but how about the neighbor who shot two deer this past season when you were only allowed one? Or the fellow who was driving around with the loaded gun in the car, jumping out and shooting from the road—did you care enough to get his license number? Then what of the guy who hunted right up to the farmer's house and barn, cut his fence and left the gate open—you saw him, but did you really care? You say it's not your job. I say the time is long past when you can turn your head and walk away. If you care about your sport as much as you say you do, then you had better get involved. You might see the day when you don't have a sport to worry about.—District Game Protector L. P. Heade, Mercer.

Slow-going Nuisance

TIOGA COUNTY — One morning during hunting season I was one of the eight or ten automobiles in a string of slowmoving traffic behind a man who was obviously dressed for hunting. It was that hour of the morning when most people were headed for work. The hunter was driving quite slowly, weaving back and forth as he paid more attention to the fields and forests along the road than he did to his driving. He was really making quite a nuisance of himself. I remember thinking that if I was a non-hunter trying to decide whether I was for or against hunting, this fellow could certainly help me make up my mind.—District Game Protector C. Keller, Wellsboro.



Let There Be Light

CRAWFORD COUNTY – While working night patrol recently, one of my deputies and I observed someone spotlighting from a vehicle. I asked the deputy what time it was, and he said "After midnight," so we approached the other car. I asked the driver if he knew it was illegal to spotlight after midnight, and he said he did and that was why they were quitteing soon, because it was 11:30 p.m. After thanking the man, two embarrassed officers left the scene.—District Game Protector H. L. Harshaw, Conneaut Lake.

Some Years Are Like That

ERIE COUNTY – Last year was an unusual one for me. First, a man showed me a blue perch he caught in Lake Erie; later the same man brought me a black woodchuck he had shot. I saw my first albino opossum, and was able to get three black muskrats from a fur dealer. A doe with antlers was shot during buck season in my district, and I saw a doe which gave birth to four fawns in the spring. All in all, it was a really unusual year.—District Game Protector W. A. Lugaila, Waterford.

Got Seasons Mixed Up

ARMSTRONG AND WESTMORELAND COUNTIES – This story was related to me by Joe Allen, of Distant. On November 30, 1974, the last day of the regular small game season, Mr. Westwood shot a grouse near Distant. When he removed the bird's entrails, he discovered a fully-developed egg in the bird. If the bird could have laid the egg and hatched it, the chick would have won the "First Baby Grouse Award" for 1975.—Land Manager H. R. Muir, Kittanning.



From the Mouths of Babes

CUMBERLAND COUNTY – During buck season I spoke to a hunter and his young son. The father complained that he was against doe season, as it was ruining his hunting. He also said there weren't any bucks left in the area, and the doe slaughter every year was the reason he could not get a deer. As he was talking and complaining, his son kept pulling at his dad's sleeve, trying to get into the conversation. Finally the youngster had his chance, and very innocently said, "But, Dad, what about the 4-point buck you missed on the first day?" Dad was still trying to explain that miss when I left.—District Game Protector J. P. Filkosky, Mechanicsburg.

Violator . . . or Sportsman!

LYCOMING COUNTY — During antlerless deer season, Game Farm Superintendent Eugene Nelson and I apprehended a man hunting deer without an antlerless deer permit. He was quite irate about being caught, saying, "If it weren't for us sportsmen you guys wouldn't have a job!" We heartily agreed that sportsmen do foot the bill for nearly all wildlife conservation measures. It occurred to me later that if there were more "sportsmen" like him, we wouldn't need violators to keep us busy.—District Game Protector W. L. Hutson, Williamsport.



Moleskin Trapper

TIOGA COUNTY — Over the past few years we've had more people turning to the trapping of raccoons and foxes than ever before. Higher prices paid by fur dealers for the long-haired furs are probably responsible for this upsurge. Now a mole isn't long-haired, but would you believe that Brian Warren, an Elkland fur dealer, had a fellow bring one in? It had been nicely skinned, fleshed and stretched . . . and I think he bought it!—District Game Protector F. A. Bernstein, Knoxville.

Helicopter Management

CUMBERLAND COUNTY — The most unusual complaint I received this hunting season: "I want a refund on my hunting license because helicopters keep flying over my deer stand. What is the Game Commission doing about it?"—District Game Protector J. R. Beard, Shippensburg.

Sportsmen Respond

CRAWFORD COUNTY — I am sure most game protectors have read with dismay anti-hunting articles and letters in various newspapers, especially since we feel we shouldn't answer these articles directly. Here in Crawford County we do not have this problem. It seems that every time someone takes a swipe at hunting, our local sportsmen answer these allegations. I must admit they do so with enthusiasm and considerable knowledge.—District Game Protector L. V. Haines, Linesville.

Bothersome Bruin

SCHUYLKILL COUNTY — While hunting for deer on SGL 58 near Zion Grove, Tom Rupert of Barnesville was lucky enough to bag a doe with his flintlock muzzle-loader. After dressing and tagging the deer, Tom glanced up to see a black bear coming toward him on the same trail the doe had used. The bear never noticed Tom until he coughed and scared the bear into the bush. While dragging the deer out to his car, he happened to look behind him and there was the same bear following him. Tom said the bear was welcome to the entrails, be he would object strongly to his taking the whole deer.—District Game Protector S. L. Opet, Tamaqua.

CONSERVATION NEWS

By Ted Godshall



PRESIDENT GERALD R. FORD, then serving as Vice President, dedicated the Raystown Lake Project on June 6, 1974.

A Look at Raystown Lake

By Wes Bower

CIA, Southcentral Division

NESTLED in the mountains of southcentral Pennsylvania's Huntingdon and Bedford counties is a new Corps of Engineers recreational and flood control impoundment. Its name is Raystown Lake.

This 8300-acre lake in an attractive natural setting is expected to attract over a million visitors annually. A great many of these will be hunters.

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Raystown Dam, authorized by a 1962 federal flood control act, forms a lake on the Raystown branch about 5½ miles upstream from its junction with the Juniata River. The lake is near the town of Huntingdon. The new dam will control a drainage of 960 square miles. The lake itself is 27 miles long and has a shore line of about 110 miles. The flood control pool will extend 34 miles to the vicinity of Saxton in Bedford County.

The new lake, which at that time was not yet completely filled, was dedicated on June 6, 1974, by Gerald



SCENIC RAYSTOWN BRANCH of the Juniata River meanders through the rugged mountains of Southcentral Pennsylvania.

R. Ford, then serving as Vice-President. On October 10, 1974, a memorandum of understanding was signed by federal, state and municipal organizations who have a direct interest in the Raystown project. These groups included the Pennsylvania Game Commission, Fish Commission, Department of Environmental Resources, Huntingdon County Conservation District and others. Since that time, the lake has continued to fill. On December 29, 1974, it finally reached a depth enabling boaters to use power motors for the first time.

Much hunting potential has been created by this project. While total land acquisition is not yet complete, the dam and reservoir area will ultimately be 15,000 acres. The public access and recreation area will add another 13,000 acres and the wildlife area approximately 2000 acres, to make a 30,000-acre area.

Three modern launch areas with restroom facilities and ample parking already have been built. Boat-to-shore camping areas for overnight stays have been constructed.

Even though all phases of the Raystown Lake project were not completed during the 1974 fall hunting season, the Game Commission noted a marked increase in hunting activity at Raystown Lake. Many sportsmen hunted waterfowl, deer, grouse and turkeys in the area. Hunters stopped at newly constructed parking areas and hiked into Corps of Engineers property to enjoy a day's hunt.

The Game Commission and the Corps of Engineers are working together in a program to provide maximum wildlife recreation.

Anticipating acquisition of the leased area, the Commission has stocked pheasants, ducks, and geese on the project. Commission officers, interested sportsmen, and park rangers caught rabbits which had been trapped on small islands by the rising waters. The animals were then transferred to a safe area away from the lake.

A mutual training program has been developed to familiarize park rangers and Game Commission officers with each other's duties, responsibilities and authority.

The Commission plans to evaluate and develop a wildlife plan integrated with the area's master plan. This will include harvesting, restocking and introduction of wildlife species, as well as managing land to develop wildlife habitat.

With the combined efforts of the Game Commission and the Corps of Engineers, Raystown Lake is sure to become a bonus area for many Pennsylvania hunters.

Smithsonian-Peace Corps Effort Helps Developing Nations

By David L. Howell
Office of Ecology, Smithsonian Institution

THE PEOPLE of Neembucu, a low-lying district in southwestern Paraguay, are heavily dependent on cattle for their income. When a freshwater snail began making inroads into pasture grasses—and emerged as the prime suspect in the destruction of up to 50 per cent of the cattle forage—Paraguayan officials put out a call for help through a unique program undertaken jointly by the Smithsonian Institution and the Peace Corps. As a result, a young American biologist named Mary Walter has been in the South American country for two years determining if the snails really do compete with cattle for the grasses; and if so, how to control the pests.

Ms. Walter, who has just extended her commitment to the project for a third year, is one of several hundred American volunteers performing environmental services in developing nations around the world under the mantle of a Smithsonian-Peace Corps Environmental Program launched in 1971.



MICHAEL GILL, right, of Wayne, Pa., performs agricultural extension work in Nepal villages. He is shown above inspecting a local farmer's wheat crop in the Janakpur area.

Snails and Schistosomiasis

Among the discoveries she has made so far is that over-grazing of the pasture grasses encourages uncontrolled development of the suspect snails. Thus we find disappearing range grasses in Paraguay taking their place alongside smog in Los Angeles, strip mine ravages in West Virginia, schistosomiasis in Egypt, and famines in Niger as one more evidence of what ecologists have been saying for a long time: that "everything is tied to everything else."

Many of the developing countries are just beginning to realize the importance of planned, rational use of their natural resources; and as they become aware of the consequences of unrestricted exploitation, they are turning with increasing frequency to the Smithsonian-Peace Corps program.

This unique effort evolved as the developing countries stepped up their requests to the Peace Corps for technical and scientific personnel to meet their own development needs. In searching for more effective ways of



PARKS SPECIALISTS are among the conservation skills most in demand through the Smithsonian-Peace Corps Environmental Program. Here, environmental biologist Joe Fox and co-workers study vegetation from atop their elephant mount.

reaching qualified individuals interested in serving overseas for two years in a developing country, the Peace Corps turned to the Smithsonian Institution. By mutual agreement, the Smithsonian now works with officials of the Peace Corps and the host countries to further define the specialized personnel needs in environmental projects undertaken by the Peace Corps for the host country. The Smithsonian then identifies scientists and professionals interested in undertaking the assignments as Peace Corps Volunteers and helps match applicants to the job openings for which they are best suited.

The program has continuously expanded, and the Smithsonian now receives hundreds of overseas requests for volunteers each year. Most of the requests are met—though some choice assignments still go unfilled each year because qualified people don't know the positions are available.

The needs of the program depend, of course, on the needs of the developing nations, which vary widely. Environmental skills for which there is great demand at the present time include wildlife biology, national park planning and management, forestry, fisheries, marine sciences, biological research, entomology, ecology, soil science, watershed management, range management, veterinary medicine, conservation education, air and water pollution control, architecture, city planning, and civil engineering.

Nepal, in the Himalayas, for example, is requesting six wildlife biologists to serve as resident ecologists in its national parks and wildlife reserves. The Island of Tonga in the South Pacific is seeking a marine biologist with a background in shellfish culture to conduct research and do field work in oyster cultivation, growth and reproduction. Lesotho, in southern Africa, has requested a soil scientist to assist in soil fertility research. The Foundation for the Development of the State of Monagas in Venezuela is requesting an architect, a landscape architect, and a regional planner to undertake a wide range of architectural and planning projects, including planning for parks and other recreational settings in cities throughout the State of Monagas.

Unique Opportunities

These and many other positions call for professionally trained, sensitive and mature individuals with a sense of dedication—both to their professional disciplines and to the enrichment of man and his environment. Volunteers accepted for such posts frequently find unique opportunities and rewarding experiences that change the course of their lives and their careers.

For further information about specific assignments or about the Smithsonian-Peace Corps Environmental Program, contact Robert K. Poole, Office of Ecology, Smithsonian Institution, Washington, D. C. 20560.

Big Goose Harvests on Controlled Areas

HUNTERS had excellent success during the past waterfowl season on the Pennsylvania Game Commission's two controlled goose areas at Middle Creek and Pymatuning.

During the season, 2058 hunters took 1228 geese from blinds at the Middle Creek Wildlife Management Area, which is located in Lebanon and Lancaster Counties. The 59 percent success figure was considered exceptionally good by Waterfowl Management Assistant Charles L. Strouphar, as 1974 was the first year for a controlled waterfowl harvest at Middle Creek.

An additional 500 to 800 geese were taken from the area surrounding the controlled hunting section of the waterfowl project.

Hunters also took 98 ducks from the Middle Creek goose blinds, and another 800 to 1000 in the surrounding area. Mallards were the predominant species harvested, followed by black ducks, green wing teal, shovelers, gadwall and pintails.

At the Pymatuning Waterfowl Area in Crawford County, 4272 hunters using the goose blinds took 3030 honkers, an all-time record for the controlled area. The number of hunters using the goose blinds was just four below the record set in 1972, according to Waterfowl Management Coordinator Ray M. Sickles.

Hunters took 1687 ducks from the controlled shooting areas at the Pymatuning. The number of hunters using the controlled duck areas totaled 2019. Leading species bagged were mallards, wood ducks, blacks and green wing teal.

About 1100 geese were taken on the public and private lands adjacent to the managed area, while an estimated 6600 ducks were taken by hunters on the public shooting areas of the Pymatuning in addition to those bagged in the controlled sections.

The success ratio for hunters using the Pymatuning goose blinds in 1974 was 71 percent.

Holders of goose blind reservations were chosen in random drawings prior to the season. There were 27,000 applications for blinds at Pymatuning, and 6346 for the Middle Creek blinds.

Resident geese at both Pymatuning and Middle Creek numbered about 2500 early in September. Migrating honkers swelled the flocks to the 10,000 to 14,000 levels during the fall, while about 8000 or 9000 spent the winter on the areas, according to Sickles and Strouphar.



Tentative Opening Dates Set for '75

Tentative opening dates for 1975 hunting seasons have been established by the Pennsylvania Game Commission for the convenience of those who wish to plan ahead.

The archery deer season this year is tentatively scheduled to open on Saturday, September 27. The tentative opening date for 1975's early small game season is Saturday, October 11, while the general small game season is tentatively scheduled to open on Saturday, October 25. Tentatively, the bear season is scheduled to open on Monday, November 24.

The antlered deer season opening date was previously established by commission action as the Monday following Thanksgiving, which will be on December 1 in 1975.

Trappers Record Best Year Ever

DURING the 1973-74 marketing year, licensed raw fur dealers paid Pennsylvania trappers $2,683,200.33 for pelts taken in the state, according to final figures compiled by the Game Commission. This is the largest total ever paid for furs in one year in the Keystone State.

Dealers bought 458,677 muskrats for $1,107,989.16, an average of $2.42 per hide; 131,293 raccoons for $949,268.96, average $7.23; 10,105 red foxes, $240,139.29, average $23.76; 9285 gray foxes, $121,696.51, average $13.11; 5485 beavers, $96,390.13, average $17.57; 56,461 opossums, $91,877.03, average $1.63; 5646 minks, $62,247.35, average $11.03; 4731 skunks, $7,569.32, average $1.60; and 1993 weasels, $6,022.58, average $3.02.

The figures represent only Pennsylvania-caught furs bought by Pennsylvania licensed raw fur dealers. Furs shipped or transported out of state by the trapper or held for his own use are not included in the tabulations.

Prior to the 1973-74 marketing year, the record paid for Pennsylvania furs was established in pre-Depression 1926-27, when Keystone pelts brought trappers $2,231,906.65.

The sharpest increases paid for furs last year were noted in returns for foxes, weasels, skunks and opossums. Red and gray fox pelts just about doubled in prices last year, compared to 1972-73. The average price for a red in 1972-73 was $11.74 (compared to $23.76 in 1973-74), while grays rose in price from an average $7.34 in 1972-73 to $13.11 last year.

Weasels jumped in price by over 500 percent, from 56 cents per pelt in 1972-73 to $3.02 last year. Skunks and opossums jumped about 75 percent in returns to trappers, with "polecats" going from 93 cents in 1972-73 to $1.60 last year, and opossums from 92 cents to $1.63 during the same time period.

The only fur to decline in price last year from 1972-73 levels was the beaver, which dropped to $17.57 from $20.06.

HUNTER EDUCATION

By John C. Behel
PGC Hunter Education Coordinator

Mini-Course For Hunter Education

SCHOOLS participating in Pennsylvania's hunter education program are providing a safe and responsive hunting course for prospective hunters.

While other students may be taking advantage of study hall, band, choir, orchestra, chess, or rehearsing a play, students with outdoor interests are given the opportunity to complete the new mini-course on hunter education.

Pottsgrove Intermediate School offers a four-week course, held during the last period of the day, which allows students to elect whatever activities they desire. Curtis Brendlinger, who teaches eighth grade mathematics and is a certified Pennsylvania hunter education instructor, has presented several hunter education mini-courses. He reports enthusiasm is great and that girls, too, have displayed a keen interest in hunting knowledge.

In another three week mini-course, the Emory H. Markle Intermediate School, of Hanover, provides instruction on safe handling of sporting arms, wildlife identification, and wildlife management techniques. Students take a field trip to a local rifle range where they are given an opportunity to shoot. In addition, a shooting program is put on to demonstrate proper gun handling techniques and the effectiveness of various sporting arms.

To date, over 790 seventh grade students have been certified in the program, which is now in its third year. It is taught during the first three weeks of the school year. Basic course content includes:

You as the Hunter—Defines what a "hunter" is, as well as explaining the

MANY SUBJECTS ARE covered by Hunter Education courses, including hunter ethics, knowledge of sporting arms and ammunition, hunters' responsibility and safety clothing. Here, personnel from the US Army Battery at Irwin provide instruction to students.



various types of hunting available.

The Safe Side of Hunting—Presents the game laws and safe gun handling techniques.

Knowledge of Sporting Arms and Ammunition—Provides general information on rifles, shotguns, handguns and archery equipment.

Proper Handling of Sporting Arms —Includes demonstrations as well as student participation in handling of guns.

The Hunter's Responsibilities—Shows how they relate to all areas of hunting safety and proper techniques.

Marksmanship—Demonstrates proper shooting techniques with an actual field trip to the York-Adams Fish and Game Club's facilities. Here students are permitted to shoot on a range with 22 caliber rifles. After all students have fired, a shooting demonstration follows using 22 caliber and 22 Magnum firearms, 30-30 caliber rifle, 45 and 22 caliber handguns, 12 and 20 gauge shotguns. The demonstrations include shooting at targets, soap, wooden blocks, water-filled cans, claybirds and pattern sheets for shotguns. Archery also is demonstrated to the group.

Wildlife Identification and Game Management Techniques — Includes the use of slides, charts, posters and pictures. Animals are shown in their natural habitats and actual specimens are used when possible. Conservation and management techniques are also introduced and discussed.

The Hunter Safety/Education Course is given to all seventh graders to promote safe hunting practices. It is felt that this course very effectively introduces the sport of hunting to the students. Exam results have been excellent, with over 99 percent of all students passing. The course does not go into extreme detail on hunting techniques. This, it is felt, must come with experience and actual use and handling of arms in the field.

Teachers Michael Hampton and Thomas F. Clough say, "The course we are teaching at the E. H. Markle Intermediate School is effective, relevant to today's educational goals and needs, and is fun for the students as well as the instructors."

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Of Things Undone

By Susan M. Pajak

IT HAPPENS TO everyone, doesn't it? Little bits of things undone that must be taken care of before it's too late. For me the past many weeks have somehow faded into long months, and the letters and other happy tidings on my desk have begun to pile up like an unforecasted March snowfall.

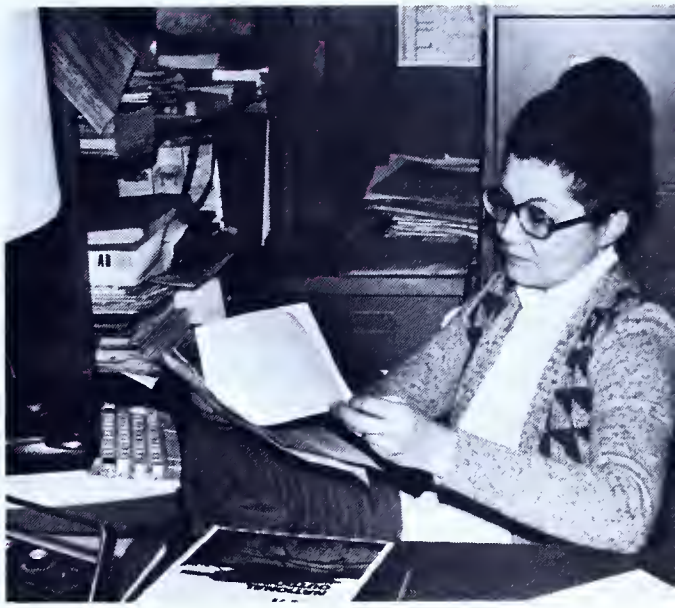
I thought you might enjoy sharing in some of my communications, which, I must confess, delight me hours on end and truly encourage, advise and, at times, instruct me.

First on the list is the mentioning of three more pen pals who would greatly enjoy corresponding with other young people interested in the out-of-doors:

1) David Kingsley, age 9, 580 Hemstreet Road, East Aurora, N.Y. 14052. 2) Dennis Kingsley, age 11, 580 Hemstreet Road, East Aurora, N.Y. 14052—I do believe it's safe to assume that these two young fellows are brothers . . .

And then there's a letter from a lovely miss: "Hi! I would like to be a pen pal. My name is Sue Rader and I'm 13 years old. My address is 1915 Township Rd. 90, RR 2, McComb, Ohio 45858. I would especially like to have a pen pal who has won some awards in target shooting. Since I got my gun (I've been using my father's) I've won a third place out of 37 kids—32 boys and 5 girls—at 4-H camp and I could get an award for it from my county. Please write!"

From one Sue to another, I hope you received an award for your shooting abilities. It's not so bad coming in third, is it? Now you'll have to shoot for a second or a first place. The challenge is what makes it so exciting. You're a good sport, Sue.



SUZY PORES OVER ONE of the many letters she receives. Correspondence delights, encourages, advises and instructs Pajak in her Girls, Guns and Game column.

From Carl Waterstradt of Sinclairville, N.Y., I received a nice note and a clipping taken from the October 10 issue of "Grit Magazine" that reads—"At 15, Helbing Shuyler, of Weatherford, Texas, is one of the nation's top shooters. She has won a second straight national women's smallbore rifle prone championship at Camp Perry, Ohio. This makes her third consecutive year on the Randle International Postal Team. She fired a perfect 400 score with 32 X's to prove she belongs."

A perfect 400 with 32 X's . . . good grief, Carl, that tends to make my scores look sick!

GIRLS, GUNS, & GAME...

From Marilyn Stull of Barto, Pa.. "On the second day of doe season I got my first deer and also received a Winchester 30-30 when I shot it, 'cause my husband said that if I got a deer with the 30-30 the rifle was mine. So I had a great year, my first deer and a deer rifle, all in one shot!!" Nice going, Marilyn.

And from Hazel Druck, of York: "Even when you don't get a shot all day, when you're tired, cold and sometimes wet from the pelting rain, or when you miss what you're aiming for, it's still great to be hunting. I have two Wyoming antelope and a couple of Pennsylvania whitetail bucks to my credit, plus a nice gathering of small game. My guns are a 240 Weatherby, a 308 and a 20-gauge . . . I got an 8-point buck in Lycoming County this past December 5." You have me dreaming again, Hazel. Loved your letter.

And someone's tootsies are cold —"I love the mountains of Pennsylvania and although I do not hunt I love to walk through the woods while my husband does all his hunting up there. Unfortunately, my feet get very cold and this spoils the trip for me. Could you please find out where a woman can purchase an insulated waterproof hunting boot? I wear a 5 to 5½ shoe. I have tried a lot of sporting outfit magazines and all the shoe stores, but everyone just laughs. I guess they think that women don't enjoy the out-of-doors like men . . ."

That letter is from Lola Jantz of 1003 Elm Street, Grafton, Ohio 44044, and if a few of our readers could advise Lola as to their triumph over the cold feet situation I am sure she would appreciate it, as she is asking for a definite solution to her problem.

It can be rather frustrating trying to overcome cold feet in cold weather, and I know that some have gone to those electric socks as they call them, but I've had no experience with them as yet.

Felt pacs are acceptable. Usually if you purchase a man's smaller size boot, leaving some room for the extra socks, an outfit like this can be comfortable. Just walking around should keep one's feet fairly warm, but it's best to purchase a good boot to begin with.

That's about it for now. I always appreciate your kind letters, so keep them coming!

Perform Fox Trick

"Tolling" dogs are used in Nova Scotia to lure waterfowl within shooting range. The dogs are bred to resemble red foxes and perform an old fox trick, that of running back and forth on the shore and thus arousing the curiosity of the waterfowl.



WITH THE RIGHT SORT of advertising, recycling programs can work . . . and be profitable. Rountree asks readers to buy their beverages in returnable bottles.

ABOUT GARBAGE

(And Some Other Environmental Thoughts)

By Les Rountree

IT HAS LONG been a policy of mine, and that of a number of other writers, to move very cautiously when being critical of another writer's material. Among outdoor writers there is a special camaraderie that declares nitpicking off limits. Oh, we frequently exchange barbed comments through the mail but, in general, try to keep downright nastiness out of print. This month, I'm going to break that rule. It's not necessary to name names in this case, since the article in question is now a matter of history and the author has received (I'm quite certain) a number of letters about it. The inflammatory piece appeared a few months ago in one of the more popular outdoor monthlies and stated in no uncertain terms that book publishers in general, and "eastern" writers in particular, didn't know what they were talking about when it came to our 20th Century garbage situation.

The article featured several mythical conversations that took place between city-bred dudes and hairy-chested western guides, bush pilots and "knowledgeable" outfitters. The scenario was similar in each conversation. The dude would insist on bringing the trash out of some remote location and the hairy-chested one would convince him that either the garbage stayed behind or he did. Rough types, those westerners!

The article really made my blood boil when the writer suggested—no, I'll amend that, he declared—that it was only necessary to lug out the trash when it was *reasonable* to do so! He

further stated that, and this is a direct quote, "packing out the empties is noble, but there are times when any camping rule must be bent to best suit your needs." Try that tune on your piano! When *any* camping rule must be bent? Who is he kidding? There are some rules that even the Neanderthals didn't bend and I'll bet one of them was to never let the fire go unattended! This kind of irresponsible article would set camping back 100 years if a mere one percent of the readers followed its advice.

The wilderness as well as the landfill projects in this country are fast filling up with garbage and while I'll admit that there is more open space out west than there is in Pennsylvania, there won't be for long if all outdoorsmen simply leave their trash

ON BACKPACKING TRIPS, there is absolutely no excuse for leaving any sort of trash behind. All trash items—cans, wrappers, foil—should be packed out for disposal through ordinary channels.





where they throw it. Leaving a candy bar wrapper or empty ketchup bottle at the end of a remote box canyon in Wyoming is no less an act of litterbugging than leaving your lunch wrappings in the middle of Times Square.

We have come a long way in ten years in the litterbugging fight. There is less trash in the woods of Pennsylvania today than there was when I first began exploring them. Be honest now, if you're over thirty years old, you can well remember when tossing an empty potato chip bag or candy bar wrapper out the window of a moving automobile was not considered bad form. Everyone did it. Plain old paper will decompose but today's plastic wrappers and synthetic bottles and aluminum cans won't.

Drowning In Refuse

Most of the country woke up in time to realize that we were in danger of drowning in our own refuse. Most states now have litterbug laws declaring that tossing trash on the ground on public or private land (without the owner's permission) is a punishable offense. Many persons in the public and private sector are working hard on finding new ways to recycle glass, aluminum and paper. In many areas, it's working well. There is also some promise that we'll be able to turn the rest of our garbage into a useful product. The organic gardeners have been doing it for a long time.

On backpacking trips there is absolutely no excuse for leaving any sort of trash behind. If cans must be

carried, they can be packed out empty for disposal through ordinary channels. The freeze-dried stuff that most with-it backpackers carry today is sold in foil envelopes that can be flattened into tiny packages that are easy to carry out. They weigh practically nothing. Food and flavorings purchased in glass containers should be transferred to plastic jars or bottles. These can be reused time and time again. There is no need to "bend any camping rules." Where it is legal, burning a small amount of paper in a campfire is acceptable, but cans, bottles and aluminum foil don't burn easily. That material must be carried out and that's all there is to it. It's better to avoid carrying it in the first place!

Gathering Momentum

The recycling of aluminum and glass is at last starting to achieve some momentum in this country. Some clubs and municipalities have proved it can be profitable to collect and sort out the green from the brown or white glass and separate the aluminum from the so-called tin or steel alloy cans. Environmentalists may be in for a setback during our energy crisis, however. It does take a lot of energy to establish new facilities to run glass and metals back through useful channels. The equipment used for making new cans and bottles is not adaptable to recycling old ones. New equipment and cheaper ways of operating it must be discovered.

The used paper market is more than soft right now, it's practically nonexistent. Recycling groups were getting a pretty good price for their collecting efforts a year ago but the demand (at this writing) is almost nil. While ordinary paper cups, toweling, napkins and bags from fast food emporiums are terribly unsightly, they are less of a problem than cans, glass and plastics. Paper will decompose and be absorbed back into the environment comparatively quickly. It can be burned without giving off the poisonous gases that most plastics produce. For this reason, a throwaway container made from paper or cardboard is preferable to one made



PLASTIC WATER BOTTLE, like this one, takes years—maybe even centuries—to decompose in nature. When empty, containers weigh practically nothing and are easily toted out in your pack.

from something else. I have long believed that the person who comes up with a workable cardboard beverage "can" will become a billionaire. In the meantime, please buy your beer and soft drinks in returnable bottles. It's cheaper and environmentally sound. Maybe I'm kidding myself, but I believe that all beverages taste better when they come from glass containers.

The combination recession-inflation is having a few good effects, according to some society watchers who pay

attention to such things. From a practical citizen's level, I think they are probably right. People are looking for cost cutting ideas. Long vacation trips are being shortened and people are "making do" with what they've got for the time being. All of this may, in the long run, be good for us and the environment. It may make us take time to appreciate the things we've been taking for granted for such a long time. The spectre of gasoline rationing or some other enforced reduction of its consumption is being talked about more frequently. Crude oil, the stuff that gasoline comes from, is being priced higher and higher by those people over there in the Persian Gulf who have more of it than we do.

Relax Air Standards?

In the meantime, here in Pennsylvania and in a number of other states, we have a pretty good idea about how much coal we still have in the ground. A new decision for the outdoorsman is about to take place because of it. There is a lot of high sulfur coal in our state and it lies very close to the surface. It's a cheap source of energy compared to the very expensive fuel oil and clean burning natural gas. A lot of people have fought long and hard to pass a set of laws that the public and the coal strippers can live with. They have also fought for legislation that guarantees every Pennsylvania citizen the right to clean air. Briefly, what we are going to be faced with is: Do we mine this high sulfur coal, make use of a bountiful energy source and relax our air quality standards? Do we continue to enforce existing laws that require coal miners to return the land to original contour or do we permit them to get the coal out faster . . . at a lower price to the consumers? These are tough questions to answer and if *you* think they are tough, imagine what some of our legislators are going through.

I certainly don't have the answers nor am I going to suggest any. The problems are complex and as campers, hunters, fishermen and citizens who love and enjoy Pennsylvania's outdoor bounty, we are deeply involved. It's our country, it's our state and if we don't take care of it, nobody else is going to. Let your legislator know how you feel about all environmental issues, or anything else for that matter. Very seldom do they receive much mail about anything except when they do something that somebody objects to. But by that time, they've already voted for or against the issue in question. Let them know before decision-making time so that they can have some feeling about how their constituents will respond to their reactions.

It's hard to believe that spring is so close with outdoor hiking time at its best. With the high cost of everything making a dent on life styles, walking for pleasure has never been more appealing. In the next issue of GAME NEWS, I'll be reviewing the more popular hiking trails in Pennsylvania and some that I'll bet many of you have never heard of. Check your walking shoes right now, and if you were presented with a new pair for Christmas, put them on and loosen 'em up. We're going hiking in April.

Shrimpy Bruin

A newborn bear cub is smaller than a newborn porcupine.

A Trip Through The Trees

By Keith C. Schuyler

Photos from the Author



IF MEMBERS OF York Archery Club feel a special stirring in their bones, there may be more to it than just local pride in one of the older archery organizations in the country. York, at one time the capital of the United States (September 30, 1777 - June 27, 1778), is the namesake of an English city steeped in archery hunting lore and the usual war gore of medieval Europe. Although somewhat younger than the oldest U.S. club, the United Bowmen of Philadelphia founded in 1828, York Archery



RUNNING DEER IS THE most popular of all targets on the well-laid-out York field course. Practice on such targets is a big factor in improving hunting success.

Club is observing its fortieth year as the main shooting line for toxophilites in the county of the same name.

The chief reason for taking a trip through the trees at this active, arrow-oriented organization is simply because it was on my itinerary last fall on the occasion of the annual three-dimensional animal shoot. A more definitive reason is that it is not a typical archery club in the state. These archers are really organized. They have produced a fair share of champions. Naming names is always hazardous, but it is only necessary to mention Linda Myers in target circles to evoke nods of recognition. This lady has amassed a string of target trophies in state and national competition that would reach from here to there. And on the hunting scene, the Doctors Bowser, E. J. and M. W., have taken trophies that would make the average bow bender drool.

Despite the fact that you will find more Dutch or German descendants than British breeds in York Archery, I can't resist a look back to the very origin of the city that claims this club. The city was named after the northern England community that served as a blood bath for Roman invaders and later as a pious pillar of religion beginning in the fifth century. In 1069 it was the key position for Norman William I's takeover of northern England.

Transplanted Vikings

Many of our ideas of sportsmanship are a holdover from those promulgated by these transplanted Vikings who moved into England from their 200-year foothold in northern France. They developed the tradition that in the pursuit of game the quarry should be given every chance to escape. However, there was a distinction between sport and necessity. Hence a sportsman seeking fowl would be expected to depend upon falconry, whereas the netter who plied his trade for commercial gain was not frowned upon. The hunter was expected to avoid unnecessary suffering for game and to follow wounded animals to the proper conclusion. As gunpowder used in guns for the taking of game didn't appear historically until the 16th century, it must be assumed that much of the earlier hunting was by bow and arrow.

It can also be assumed that the same traditions were, in one way or another, carried to the outskirts of the first permanent settlement in Pennsylvania west of the Susquehanna River. Hunting practice is the big thing prior to the fall archery season for deer at York Archery. To make certain that everyone will be tempted to put in the practice deemed necessary, the club holds the three-dimensional animal shoot as an invitational affair. Each year more targets are

added to accommodate the 150 or more bowmen who show up.

All likely positions are simulated, from high shooting stands to elevated targets, as well as the more conventional straight and level situations. To accommodate club members, lights are provided at the more popular targets for night shooting.

One target is a running deer, which provides a real test of shooting ability. As at every range which provides such animation, this cable-manipulated, power-driven simulation gets a real workout. A high bank behind the target offers safety for the archers but is no guarantee against broken arrows for the less accurate.

Included in the targets is a mammoth white bear which would probably frighten off the average bruin but delights all but those who fail to hit it. Lobster pegs provide teeth for the battered behemoth, which is only one of many game species concocted of styrofoam and burlap. The intended simulation in some cases may challenge the imagination, but dimensions of the creature represented have been retained for the most part. Misses must consequently be charged to target panic, buck fever, or any of the 729½ other reasons. All distances are unknown. No rangefinding devices are permissible nor is it allowed to step off the distance from shooting site to target.

Under the York Club scoring system, up to four arrows are allowed at each target, but the first hit is the counter. Top score on each target is 20, with scores decreasing by 5 for each hit after the first. Any hit counts as a score. Of course, broadheads are not allowed.

Shooting groups are confined to no more than six in number nor fewer than two. A three-foot circle around the shooting flag marker is permitted. Flags may be hanging from trees, bushes, or standards. Care is encouraged in handling the animal targets to avoid damaging them.



Field co-captains Wayne Schuler and Larry Gerlach and target-range captain Don Portner were responsible for setting up the range last year.

York Archery Club, although started in 1935, did not move until 1958 to its present location during the big surge in state archery as bow hunting developed. Charter members were Mr. and Mrs. Merrill Briggs, Mr. and Mrs. Lloyd Wheeler, Harry Young, Charles Hullman and Mr. and Mrs. D. E. Moore. Their names are permanently inscribed on a plaque in the spacious clubhouse.

The building houses a 20-yard indoor range and a modern kitchen. Although refreshments are normally confined to the usual across-the-counter club cuisine, it is possible to serve full course meals.

There are currently some 300 members in the active organization which had William Markey as president at the time of this writing. Field vice president was Sterling Thompson and Stan Lenhart was target vice presi-

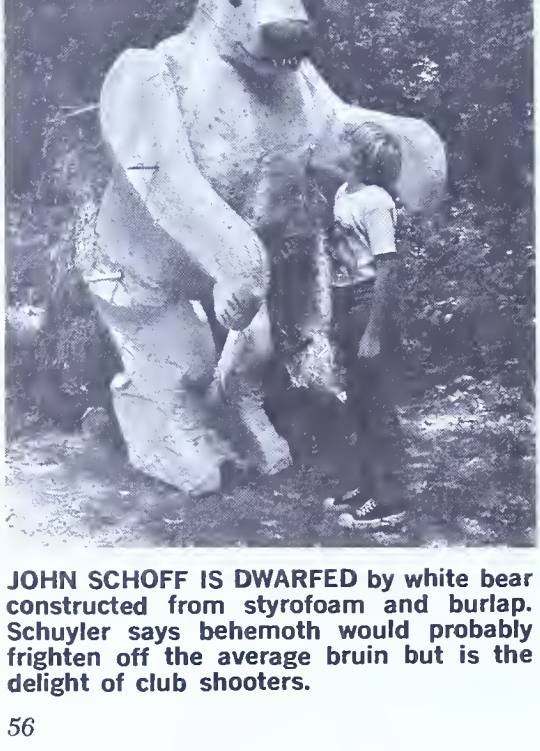


dent. Sharon Schuler was treasurer, and Linda Thompson served as corresponding secretary.

Going into its seventh year of a regular shooting program, York bowmen have indoor shoots each Thursday and Saturday during the winter. Practice is permitted at any time other than scheduled meets. A flight system with handicaps is utilized for the weekly contests and other events are scheduled around the regular program.

Prior to the hunting season, the club cooperates with the Pennsylvania Game Commission in the state-wide hunter safety program.

Active members Mr. and Mrs. Bernell Shoff, and son John, provided a guided tour of the range on our visit. It is well laid out with a good cross section of simulated field shots. In addition, an area in front of the clubhouse has been leveled for outdoor target shooting. Total accommodations add up to a complete archery facility, whether the interest is in outdoor or indoor target shooting or field shooting.



JOHN SCHOFF IS DWARFED by white bear constructed from styrofoam and burlap. Schuyler says behemoth would probably frighten off the average bruin but is the delight of club shooters.

York Archers, Inc., is found by taking black-topped Rt. 124 nine miles east of the city itself. The road is well kept and it sees a lot of service as indicated by the large membership in the club.

Possibly one of the factors which has led to success of the York club has been a fairly strict list of rules which are posted on the building for all to see. Such regulations are frequently a matter of contention in similar organizations between those who prefer to have a minimum code to follow and those who are more concerned with safety and personal behavior. There is no intent to dictate from these paragraphs, but it generally follows that those clubs which adhere to a more strict set of rules hold together better over the long haul.

No Firearms

Firearms are not allowed on the York property nor is hunting permitted. This, of course, will vary considerably among organizations, depending upon geographical location and proximity to areas wherein the longer reaching arms can pose a hazard.

However, one regulation that frequently involves differences of opinion is strictly enforced at York: "No alcoholic beverages."

Clubs which permit them can point to excellent safety records to support relaxation of this general provision. However, the opinion here is that York has the better approach. If a mishap should occur when alcoholic beverages are in evidence, there would always be the question of whether or not this was a factor. As the late humorist Day Yeager always said, "Alcohol and gunpowder don't mix. Anyway, it tastes awful." This

might be extended to "Arrowheads and alcohol don't mix." (Besides, you might cut your throat.)

At York no one under 12 years of age is permitted to shoot unless accompanied by a senior member. There are a number of good reasons to favor such a rule, safety being the most obvious one. Kids can become too absorbed in what they are doing and hold up those who must shoot on a more restricted time schedule. A field course shouldn't have to double as a nurse for parents who might use it to get the youngsters out of their hair for a while. A child interested enough to want a chance at the field targets should be able to find a senior member interested enough to help him or her learn as much as possible.

More obvious rules at York include restrictions on backtracking on the field course (always dangerous), returning found arrows to the clubhouse, placing bows in front of the target while searching for lost arrows, refraining from practice during a field shoot, refraining from nocking an arrow when someone is in front of the shooting line.

Rules Not Observed

As obvious as they might seem to any seasoned archer, these rules are not always observed on some ranges. It makes one shudder to see one or a group of archers returning the wrong way on a field course if they decide to drop out for one reason or another. Field courses must be approved by officials of the P.S.A.A. on affiliated club grounds, but they are laid out to make it safe to follow directions to targets by consecutive number. Whether written or not, the rule is always to walk to the end, or the mid-course target which is usually close to the clubhouse, if shooting for a group is completed. At regular tournaments, each group starts at a different target. Consequently, each usually finishes somewhere out on the course. The long way around is always the safest way home.



BURNELL SHOFF, RD 1, Windsor, tests the 3-D turkey. A small, difficult-to-hit target, the bird provides practice for small game archery enthusiasts.

Placing a bow in front of the target is immediate warning to a following group that a timeout is being taken to search for a lost arrow. Such persons are frequently hidden by the target butt and an overshoot or ricochet could be fatal.

At the price today of good target arrows, common courtesy demands their return to the arrow barrel at the clubhouse so that the owner might recover them in due time.

There is no room on any range during a tournament except for those who have paid the price of admission, and they should not be held up by a casual archer or archers just out for the exercise.

A bow is only dangerous when an arrow is nocked; anybody in front

of the shooting line is there for some purpose other than to present a target. An arrow should not be on the string when someone is forward and there might be the temptation to shoot for any reason.

Trash barrels on the York course encourage everyone to keep the place clean. No soda bottles (or cans) are allowed on the field course.

Distance No Deterrant

Geography of the York club is saved for the final pertinent comment. It is obvious from the membership that distance is no deterrent where a proper program is provided for participants. It is becoming increasingly difficult for larger communities to find a suitable location for a field range within reasonable proximity. Land values have made such acquisitions tougher each year. York, with a metropolitan population of 329,540 according to the latest census, is fortunate to have an archery facility with multiple accommodations even within nine miles.

This should be warning enough to all archery clubs which hope for a future to gather in some land suitable for their purposes. Land values may be taking a breather in many areas, before going up further, because of the dented economy. Organizations which have a place to shoot on a leased or a temporary basis should look to obtaining an option or outright purchase of property. Those fortunate enough to have had the energy and the foresight to acquire permanent possession are indeed fortunate. Not only has this insured a shooting area for the future, but value of the property alone in many instances has given members an increasingly important stake in their own possession. Members are much more reluctant to leave an organization which has a growing real estate value than to vacate a loosely knit group that can be dispossessed from a property to which it does not have title.

With a large part of 1975 remaining, it is time to take stock of the present and the probable future of the club in which you are a member. There will be those temporarily unemployed who can make themselves useful in constructing a clubhouse if none presently exists. Material prices are again somewhat relaxed since the slump in construction. The more fortunate may be able to help financially, while others may be in a position to contribute labor in lieu of cash.

Although it may take courage to initiate the necessary steps if archery is to have a permanent base in your area, the need is apparent. If each presently associated club in Pennsylvania State Archery Association would get its share of the present number of bow hunters alone, the current potential is roughly 2000 members for each. This is admittedly looking through rose-colored glasses, but out of each 2000 archer-bow hunters there certainly is the strong possibility of gathering in sufficient numbers to form or maintain an active archery organization.

In looking back over 15 years, it is somewhat alarming to note that the number of affiliated state clubs has dropped off nearly one-third. Yet the number of participants on the hunting scene is approaching three times that of 1959.

It becomes obvious that more and more are taking part without benefits of organized archery. Of course, you can't win them all over no matter how well you develop a program or provide facilities. But if there's no program nor any facilities, it is a fair bet that none of these newcomers are going to become a part of an organization which maintains and sustains a viable archery program.

THE PROGRESSIVE SHOTSHELL PRESS



SHOTSHELL PRESSES HAVE been perfected to the point where they can easily load up to 300 rounds per hour. They offer great savings to the gunner who uses much shotgun fodder.

By Don Lewis
Photos by Helen Lewis

"I DON'T CARE IF it's a single stage, double geared or progressive press, it's gonna take some doing to turn out 25 rounds in less than two minutes. I've been shotgun loading ever since I bought a Eureka outfit in 1932, and in those days, Lewis, you and your buddies were walking past my house to grade school."

"No one is questioning the fact that you're the best shotgun man in these parts, with a lot of handloading experience; but things have changed. Shotshell loading presses are designed today for speed. We'll show you if you stick around."

"Let's see you do it," the aged shotgunner fired back. "I'm always willing to watch anyone make a durn fool of himself."

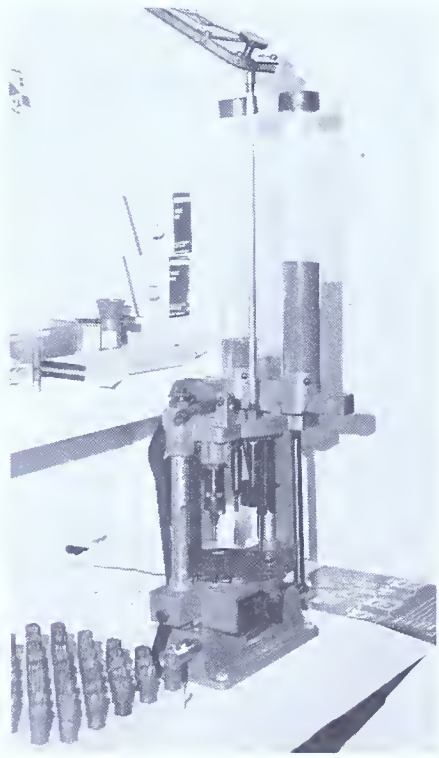
I had several multi-stage loaders in for testing, but we chose the Ponsness-Warren 800B Size-O-Matic because it is designed for speed and mine was in a location where three people could work. With one fellow setting the empty cases and his partner stuffing wads, all I had to do was keep an eye on the automatic primer feed and pull the shovel-type handle. After a few practice rounds, we started.

Our game plan was to start slow and work up speed during the first 25 rounds. We had set out a hundred empties and wads with the promise of having them loaded before the old fellow's railroad watch ticked off eight minutes. Our confidence began to build when the first box was finished in just under two minutes. One of the fellows called for more speed, and I began to really pull the handle.

The P-W 800B is a heavy duty, all-steel press truly built for mass pro-







MEC 650 HYDRAULIC PRESS, above, is shown with MEC E-Z-Pak and wad trays. At left, above, is Size-O-Matic 800B and below is Pacific DL 366, a multi-stage outfit of good design and strength. Note empties set up for run. All three presses operate in essentially the same manner and can really crank out the shotshells.

duction. An 8-station shell holder turret indexes automatically each time the handle is pulled. Primers and powder/shot charges are also self-operating, and the operator does nothing more than set an empty and stuff a wad, getting a finished round with every pull of the handle.

By the end of the second 25, we had cut the time to 95 seconds. At the end of 75 rounds we felt like experts, doing the last 25 in a mere 75 seconds. For some reason we lost ground on the fourth box, and I inadvertantly pulled the handle before an empty was set, thus bringing the time test to a quick end. Nonetheless, we proved our point by averaging around 95 seconds per box. I think that's turning out home fodder at an amazing clip.

After World War II, rifle handloading swept through the shooting fraternity to the point that many hunters didn't want to be caught with factory stuff. There existed at that period a belief that handloads were vastly superior to factory shells. This wasn't exactly true, but handloaders were doing a full scale business.

The shotshell press remained in the background, mostly because the emphasis was on rifle loading. In fact, during the early 1950s the Lyman Straightline Loader was the only one I can remember being advertised. It was nothing more than a set of hand tools that required time and patience to use.

I was so wrapped up in chuck hunting that I had my rifle ammo loaded by a friend, and it wasn't until after 1955 that I got involved in handloading. At first it was pure rifle fodder, but in 1960 I watched a demonstration with a MEC 400 that made me think twice about buying shotgun ammunition. Watching a perfect round being cranked out every four pulls of the handle put shotshell loading into a new perspective.



300 Per Hour Easily

From my association with simple hand tools and the MEC 400, I still find it hard to accept that shotshell presses have been perfected to the point where they can easily load 300 rounds or more per hour. I have never advocated pure speed for any type of reloading, but unlike the metallic cartridge, the shotshell hull can be reloaded at a rapid rate. With rifle loading, the press and die sets aren't the prime factors; it's really the handloader checking flashholes, case lengths, bullet depths, etc., that produces the ultimate in good loading. The rifle cartridge handloader must be meticulous and repetitious, doing every operation exactly the same way each time around.

Shotshell loading is different. Here the press plays the paramount role, and with the multi-stage or progressive type press, the operator just feeds an empty and inserts a wad in the wad carrier. Primers are fed automatically; powder/shot charges are dropped from metering bushings, and the crimping operations are handled by floating fingers that locate the old folds and guide them into a perfect crimp. With these modern high output presses, the only thing the operator can complain about is running out of shot and powder.

It's elementary to say progressive type presses operate in much the same manner, but in another sense, each has certain characteristics that make it a little different. Going back to the 800B P-W press, primers are fed

down a curved traek from a pan large enough to aecept a full box of primers. Probably the outstanding feature on all P-W presses is that each case stays in a full-length sizing die during the entire loading operation. This is especially important when eases have been loaded a number of times.

I have always appreeiated good machine work. Sometimes I get my Winehester Model 71 348 brushbuster out just to admire its innards. That old rifle shows maehining at its best. This can also be said about the P-W 800B. Heavy, strong and made from solid steel, it will give years of hard usage.

Small Complaint

With all it has to offer, I have a small complaint against the 800B. I wish a tapering crimp operation had been incorporated in the final crimp die. My P-W press puts a small flare on the crimped end that might eause feed problems in pumps and semiautomatics. I've worked with the crimp depth adjustment, but never gotten entirely rid of the flare. For the most part it is not a severe problem, but a tapered radius would have eliminated any possible feed problem.

I think it's only fair to give eredit where eredit is due, and it's my belief that the MEC Company gave the shotshell loading buff the first loading outfit designed for speed. Around 1961, a press called the Grand American hit the market and was an early version of the modern indexing press. I never used one, but it had all the signs of a reliable outfit. MEC's 250 and 400 Models were in great demand then, and by the time MEC's 500 Model was on the market Pacifie was offering three DL outfits, each featuring Pacific's "Taper-Loe" erimp.

There's no point in naming all the presses of that era, but it does seem strange that shortly after 1960, C & H, Lyman and Paeific—and probably others—took a seeond look at the shotshell loading press. The emphasis had been on the rifle eartridge until MEC hit the market with the press that did its own thinking. I eould be wrong, but the MEC press way baek seemed like an offspring of the old C. R. adapter loader that fit on many single stage rifle presses. The C. R. adapter featured full-length resizing, deeapping and primer seating, plus shot and powder measures and a tapering crimp. Still, it's my belief MEC whipped up the interest that put shotshell loading on par with the metallic cartridge.

The eomparatively new MEC 650 Hydraulie outfit I've been using has all the earmarks of a great press.

There does seem to be some misunderstanding about the hydraulic system on the MEC 650. Some users thought this design was intended to make the press lightning-fast, but this is not true. The hydraulic pump moves the press head down with a very even stroke, with heavy springs returning it to the top position when the pedal is released. I thought once the pedal was pushed the press made a full down stroke, but I soon learned this was not the case.

The operator can stop the downward movement before it reaehes the full stroke and drops the powder/shot charges. I like this very mueh, as sometimes I didn't get a wad positioned properly or failed to index the rotating shell holder to the next station. Releasing the foot pedal allowed the press head to return to its normal position.

My most serious complaint against the 650 is its primer seating deviee. On the downward stroke the automatic primer feed drops a primer into a hole in the rotating plate. When the operator manually indexes the shellholder plate, the primer is supposed

o drop into the primer seater. Often, t jammed and required a little back-ng up before it fell into place. This, o me, was annoying.

Pacific's DL 366 is a multi-stage ress that incorporates good design nd strength. Like the MEC 650, the 66 indexes manually but has eight hellholder stations. Unlike the MEC 50, the Pacific outfit offers a full-ength sizing and decapping die sep-rate from the rotating shell holder vhich has only a decapping die. I had imilar problems with the primer feed n the DL366, which works on the ame principle as the MEC. I think oth companies would have been wise o cut a slot up the primer holding ube so the operator could tell when rimers were running low. On these igh output multi-stage presses the perator becomes so involved feeding mpties and wads—plus pulling the andle—that it's easy to forget how nany primers are left—and then he's ot problems.

The Bair 600 has to be classed as high quality, heavy duty outfit. It, oo, has a full-length sizing die sep-rate from the shell holder. The Polar Bair 600 seats primers consistently vithout danger of concaving the base of the shell. The automatic swing-out wad carrier makes it easy to slip in a wad, and I like the adjustable taper lock built into the final crimp die. The Polar Bair 600 utilizes a variety of bushings for powder and shot charges, similar to the other progressive type presses.

I haven't made a complete circuit of all the progressive shotshell presses, but I think I've covered enough ground to show the worth of these fine outfits. True, they cost more without offering any more in the way of a fine handload than the simple single stage outfits, where the operator moves the shell a step at a time. But they do produce shells much faster. And I *do* think that over a long period of time the ease and convenience offered by the progressive press will soon make the owner forget the original cost.

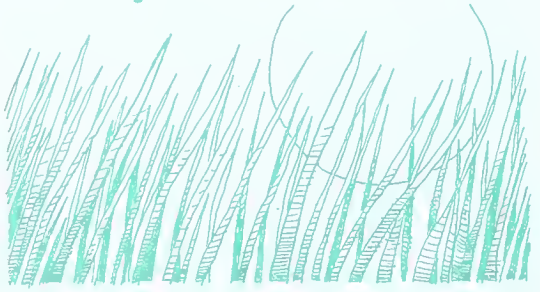
It's a long road back to the first outfit I used, but with today's market featuring the likes of what I've described here, no shotshell loader needs to take that trip. The brand of the multi-stage press is purely a personal matter, but I'm convinced that the "set an empty - stuff a wad" press is here to stay.



LDEST LIVING GAME POTECTOR is Burt . Benson, here shown celebrating his 08th birthday. Mr. Benson was a DGP n Huntingdon Co. until his retirement in 934. Shown with Mr. Benson are, left o right, Mrs. Allen Benson (daughter-in-aw); Mr. Allen Benson, a son who lives n San Diego, Cal.; Mrs. Earl R. Gracey, aughter, of Lewistown; and grand-aughter Mrs. R. O. Welander of Alex-ndria, Va.

In the wind

chuck fergus information writer



A recently-released Environmental Protection Agency public opinion survey shows that the fuel shortage has not diminished the American people's desire to eliminate pollution. The national survey, taken throughout the country last summer, followed up a similar 1973 sample that showed impatience with progress made in environmental protection, concern for damage to the ecology, and a willingness to pay for a better environment.

—*National Wildlife Federation*

Volunteers for a Texas peregrine falcon survey reported a significant increase in falcon sightings last year. Logging 2000 miles on Texas beaches, individuals saw about 540 birds compared to 380 for the same period last year.—Gun Week

Raids in ten states by special agents of the U.S. Fish and Wildlife Service have seized numerous eagle and migratory bird feathers and carcasses and hundreds of American Indian curios made with parts of Federally protected birds. Most of those cited were non-Indians selling items to tourists and collectors in violation of Federal laws.

—U.S. Fish and Wildlife Service

Governor Milton Shapp recently signed into law a bill reducing taxes on farmland and open land kept from development. Known as the "Clean and Green" bill, the act is designed to protect Pennsylvania's undeveloped open spaces and encourage continued farming of agricultural lands. The concept was originally approved in a 1973 referendum by state voters.

A three-year study of sea otters in Alaskan waters has been requested by U.S. Fish and Wildlife biologists. The study will center on the expanding population of these mammals in Prince William Sound, where the Trans-Alaskan pipeline will terminate and load oil onto ships.—Gun Week

More than 26 species of "exotic" fish, amphibians and reptiles injurious to native wildlife are now banned from importation into several Western states. The Colorado River Council, an association of state wildlife agencies, outlawed lampreys, piranhas, walking catfish, coral snakes and other species.

—Wildlife Management Institute

Automobile emissions account for about 4000 deaths annually and four million worker absence days a year, according to a study by the National Academy of Sciences. The deaths are attributed to bronchitis, emphysema, and asthma. Work days lost are caused by respiratory illnesses. Of the total health hazard posed by air pollution from all sources, about one-tenth to one-fourth can be traced to auto emissions, the report says, although this varies in different geographical areas.

—National Wildlife Federation

Pennsylvania Game Commission Directory

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ROBERT S. LICHTENBERGER ..... *Deputy Executive Director*
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WESTERN GAME FARM—G. Russell Enlow, Superintendent, R. D. 1, Cambridge Springs 16403. Phone: A.C. 814 398-2212

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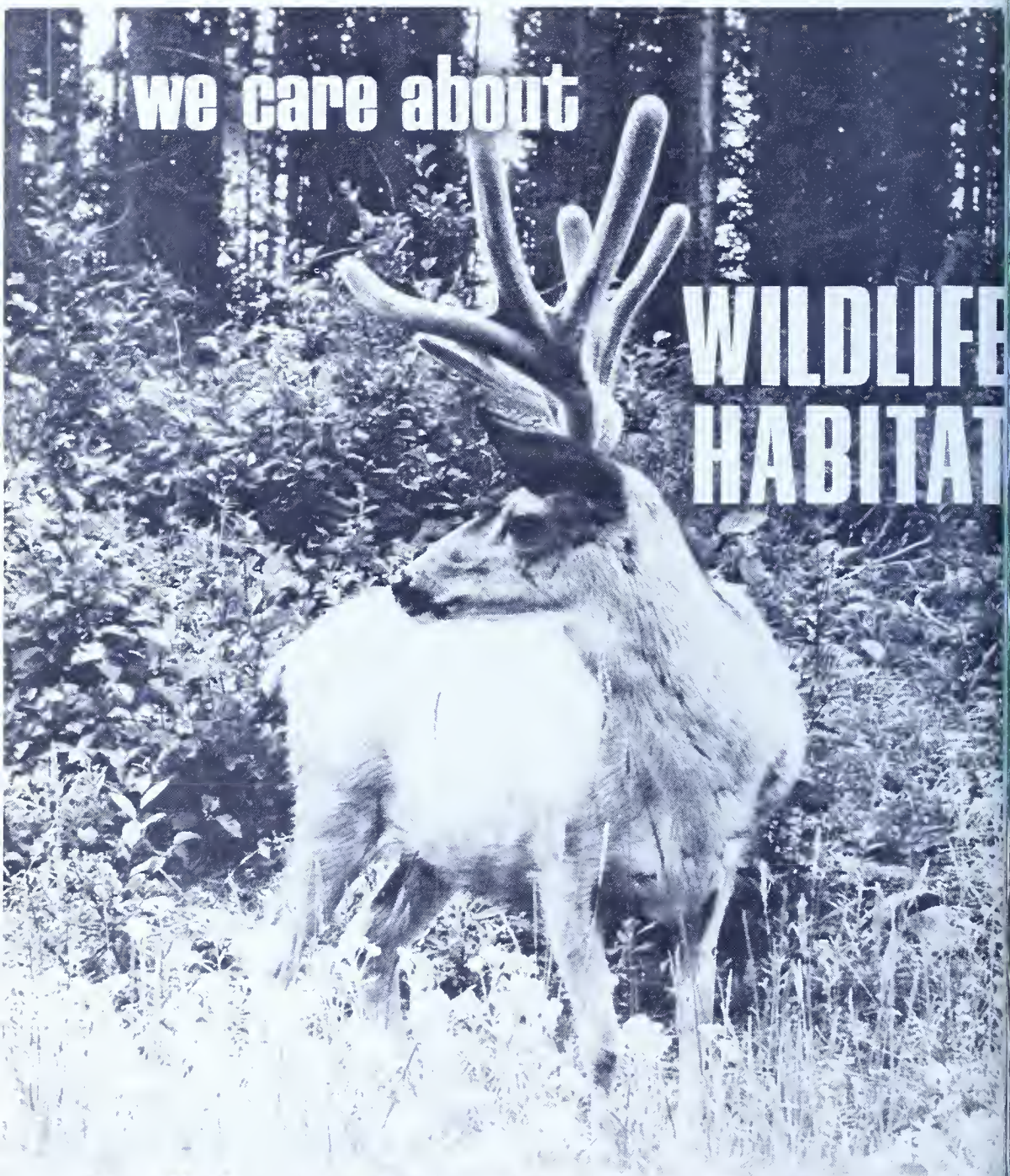
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COVER PAINTING BY TAYLOR OUGHTON

There are many ways to see the country. Perhaps the most truly satisfying is the oldest way—on foot. The backpacker becomes familiar with a region in a way that no one else can, by becoming personally involved with its ridges and valleys, its streams and trails. He is the most independent traveler known. He carries his necessities on his back, moving, eating and sleeping when he wants, free of the tyranny of others' schedules, responsive only to himself. Each new day is an adventure to wake up to. It's great. You ought to try it.

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EDITORIAL . . .

Handgun Ammo Ban Proposed

THE U.S. CONSUMER PRODUCT SAFETY COMMISSION has received a petition requesting a ban on handgun ammunition. If the ban is approved, sportsmen and other legitimate handgun users will soon find themselves with no way of using their equipment. A handgun without ammunition is about as useful as an automobile without gasoline.

In June 1974, the Committee for Hand Gun Control, Inc., of Chicago, Ill., petitioned the CPSC for a rule banning the sale of bullets [sic] for handguns, with exceptions for police, licensed security guards, the military, and licensed pistol clubs. In September 1974 the CPSC denied the petition. In a judicial action which challenged the CPSC's decision, the U.S. District Court for the District of Columbia ordered the CPSC to ". . . commence consideration of plaintiff's [the Committee's] proposal." The CPSC, therefore, seeks written public comment on the petition. The petition claims that handgun "bullets" are hazardous substances under the provision of the Hazardous Substances Act of 1960, enforcement of which Act was vested in the Commission by the Consumer Product Safety Act of 1972, and that these "bullets" present an unreasonable risk of injury and no feasible standard would protect the public.

On January 21 we received information that the CPSC was taking a phone poll on the proposed ban over their toll-free "hotline." I called immediately, but was told that this poll had been discontinued after running January 15-17. Apparently the existence of this phone poll was made known to only certain groups. I was told I could submit a written comment.

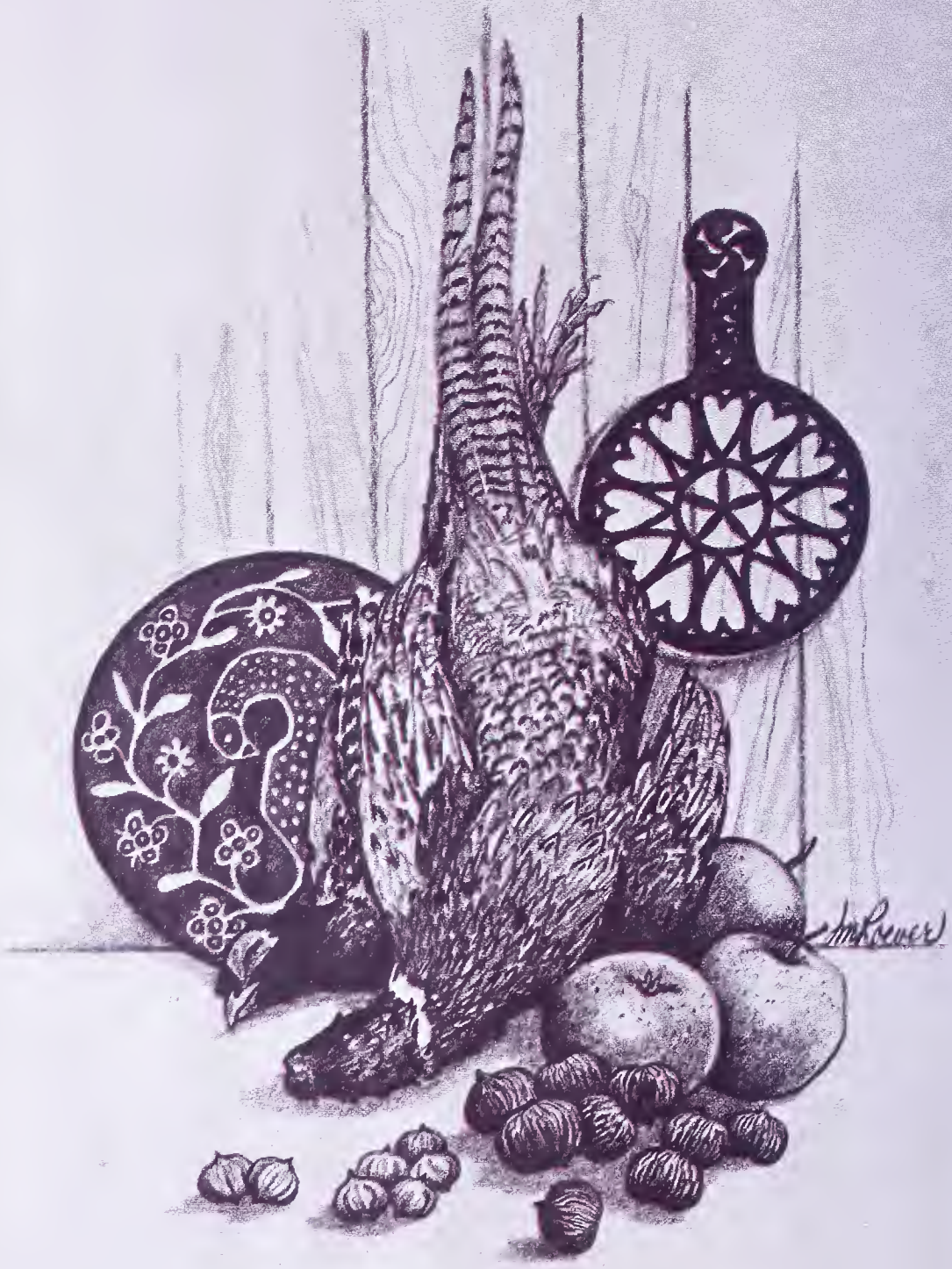
On February 14, as required by law, the Committee's petition to ban handgun ammunition was published in the Federal Register. Interested persons were invited to submit, *on or before April 15, 1975,* written comments regarding any aspect of the petition. Letters, preferably in five copies, should be addressed to the Secretary, Consumer Products Safety Commission, PO Box 8137, Washington, D.C. 20024. *We strongly urge that copies of your letters should also go to your U.S. Representative and U.S. Senators.* All these persons are extremely busy, so letters should be brief, polite, and concisely state your feelings on the proposed ammunition ban.

The limited knowledge of the Committee for Hand Gun Control is shown by their use of the word "bullets" when they obviously mean "cartridges." Nevertheless, their intentions are obvious and if this petition is granted everyone who wants to use a handgun legitimately will be out of luck. And if it's accepted that handgun "bullets" are hazardous substances within the definition of this Act, rifle and shotgun "bullets" will doubtless also be declared in the same category soon. Where will that leave the hunter, the competitive rifleman, the claybird shooter?

Time is short. Let your opinion be known. Write those letters now.

—Bob Bell

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There Was a Time, Not Really Long Ago, When . . .

They Lived Off the Land

By Rev. George Harting

"NOMAD" was the name printed prominently on the rear of the homemade travel-trailer; it bore West Coast license plates and was being towed leisurely across the Lehigh Valley throughway. My errand that day was urgent, so I passed the eastbound vehicle and hurried to meet my appointment. The implications, however, of those North American nomads, now out of sight, became intriguing.

A nomad, I had learned as a boy, is one who endlessly wanders without the security of a fixed home. Into my mind flashed an appropriate quotation: "And he removed from there . . . and pitched his tent . . . and there he builded an altar." Here is reference to the true nomad. The desire for survival drove the ancient patriarch and his household in search of pasture and water; the reference to the altar, and its indication of accompanying gratitude, hints that the search was successful.

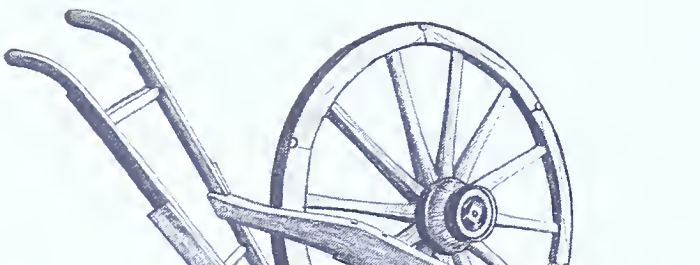
Now the endless cycle of wandering could be, at least temporarily, halted. The true nomad knows, in the best sense of the word, what it means to "live off the land." An American traveler who names his craft "Nomad," however, is not a facsimile of the original; he is not skilled enough to cope with the kind of situation the ancient Oriental faced. Even for the American traveler whose circumstances seem most desperate, there is always home: the figurative oasis that suggests the fellowship of friends, the comfort of the fireside, and the security from an economy of plenty. The title "Nomad" reflects more fiction than fact.

Commentators on the history of human development affirm that the growth of agriculture laid the foundation for today's society. Though primitive at first, it added the valuable asset of planning to assure a filled table and an adequate diet. It dare not be imagined, however, that this domestic achievement was the result of a single bound to the top of the ladder labeled "plenty"; civilization rises on that ladder rung by rung. While the effort of agriculture halted the ceaseless wanderings of the American nomad, it must be understood that the primitive experiment also remained integrally allied to the skill of living off the land.

Abundant Resources

The settlement and development of rural America was spurred by the abundance of resources; this was true whether it involved the early settler in the heart of the Keystone State or the pioneering homesteader who invaded the inner sanctum of the Western Rockies. Sportsmen who are alert while seeking game find in the hinterlands of our state the marks of the pioneer: the remains of an ancient foundation, the abundant water flow from a crumbling spring house, the high stone wall fences suggesting cleared fields, the handsmithed hardware of a decaying wagon. These, as well as many related clues, point to the "blood, sweat, and tears" that were a part of our forefathers' way of life. The topsoil was deep, the cord wood bountiful, the spring never-failing, and the game abundant, so they "dug in" and called it home.

The welfare of the pioneer, however, was often desperate. Seed stock was marginal, equipment primitive and finances nil. If these hardy adventurers failed to learn the lesson of supplementing their domestic efforts



SPORTSMEN seeking game often find in the hinterlands of our state the marks of the pioneer: the remains of an ancient foundation, high stone wall fences, the handsmithed hardware of a decaying wagon . . .

with the natural fruits of the land, the experiment often ended at a nameless grave.

If a student is motivated, he can find current sources of information that identify food plants, herbs, and vegetable health aids of which we are generally ignorant today. In his book *Folk Medicine Plants*, Paul R. Wieand names and describes more than 150 plants or herbs that served either as food seasoning or medicine in early Pennsylvania Dutch families. In his preface, Mr. Wieand states "All of the plants played a big part in the lives of the folk of yesterday . . . although our grandparents had need to call the doctor, they had need too for advice from grandmother and used it efficiently. However, they found out that nature, time, and patience were the three most helpful healers."

Wilderness Foods

GAME NEWS, in April of 1972, published an interesting article named "Wholesome Wayside Wildings." The article explains that breads, salads, sweets, seasoning, coffee and tea were all food resources of the Pennsylvania wilderness; all were edible and wholesome. The author, J. Almus Russell, explained how our forefathers made bread from white oak acorns, how wild rice, white water lily roots, melted bear fat, sunflower seeds, great burdock, white hops and many other wilderness plants were prepared, and how chickory was used as coffee. In the July, 1960, GAME NEWS, Tom Forbes' "Out-Door Delicatessen" introduces the reader to the common puffball; Forbes contends it "can provide you with a meal from nature."

These are but a few references from many that are available; they educate the present generation to the staples from nature that provided menus for our elders. Each locality and each nationality, of course, furnished its own variations to the list. It is evident that as civilization progressed and the benefits of an expanding agriculture, transportation, and refrigeration became available to our remote settlements, the "nature" foods were dropped for cultivated items that may have seemed more sophisticated or which were, at least, more easily acquired.

Some of us who have enjoyed the fortune of rural living from birth have witnessed the remnants of this pioneer economy at work. My thrifty grandfather, I am told, reared his family in the fertile flatlands of Lancaster County; he trained his children to be frugal and industrious, and lauded good management as the catalyst for success. Since my father was the youngest in the family circle, I arrived too late in time to remember grandparents—to know first hand their way

of life or to enjoy the feast and fellowship that knit the clan each Thanksgiving Day.

Upon their death, however, the fall festival was transferred to the home of an older daughter, a gathering that took us to the remote farm site that Uncle Jake and Aunt Maria were carving from what was then the backwoods wilderness of Berks County. Here I personally witnessed during the late '20s some remaining elements of a way of life that required the plow to assure a basic economy, but an economy, also, that leaned substantially upon the good graces of Mother Nature to supplement and round out a stable livelihood.

A personal memory from the one-room schoolhouse is the sound of youthful voices singing "Over the river and through the woods to grandmother's house we go." There was no fake in these lines for many of us. In my mind I simply substituted Aunt Maria and the theme perfectly stimulated anticipation for that unique day each fall when we met at her house with the kinfolk.

We were farmers and traveled by buggy, so Thanksgiving Day activities began early. After farm chores were completed, the long slow trek began. After five miles on improved roads, we came to the turn-off where the road changed to gravel, then dust. A cattle gate marked the entrance to the homestead; we were now but a stone's throw from the day's excitement.

Our arrival was in time for dinner —the midday meal in those days. It, in itself, reflected a rare combination of a planned and natural economy. Turkey was the main ingredient; it was homegrown, not forced by chemicals and manufactured feeds. The gobbler's diet was domestic grain supplemented by a supply of acorns and grasshoppers consumed while it was foraging. The delicacy of wild strawberry and elderberry jam added a touch to the feast that cannot be matched by anything found in the supermarket; the fresh fruit for the preserves was garnered from fencerows and marginal grass plots.

By dessert time, most of us had already passed the point in our eating where discretion should have called a halt, but who could resist homemade cakes flavored with black walnuts or hickory nuts gathered from the forest floor where the trees grew unattended? As we finally staggered from the table, few among us had the incentive to reflect on how the benevolence of nature was depended upon to furnish our repast.

Now we were ready to fraternize, a delight that took many shapes during the afternoon. My older male cousins were hunters. Careful planning that morning allowed them to tramp some favorable cover before arriving in time for the feast. Afternoon activities included the yarns these morning hunters related. A rifle range was set up for plinking, and by using a barn door as a shield, a temporary trap range was put into operation.

As the day wore on, the crescendo of activity settled to a calm and there was time to reflect upon the social and economic implications of rural life. Passing years, however, have a way of setting events into their proper perspective. One is inclined, now, to



UNCLE JAKE'S SONS told how monstrous blacksnakes raided the mice in the barn loft and of the copperheads that wriggled down the fork handle as they pitched hay. I was scared!

indulge in the "good old days" with shallow naivete; but facts indicate that folklore often fails to recognize the natural science that our forefathers employed for their survival.

I was then the "small fry" in the crowd of more mature cousins, chief among whom were Uncle Jake's sons; they acted as hosts for the day. They were burly men seasoned in the ways of the out-of-doors, skilled hunters, and excellent story tellers. Their tales held me spellbound. They spoke of the farm, telling how monstrous blacksnakes raided the mice in the barn loft and of the copperheads that wriggled down the fork handle as they pitched hay. I was scared! "But we got rid of them," they affirmed. They fenced in the swamp and rock ledge that winter, so the hogs could clear out the waste and prepare it for a cattle pasture. "The hogs handled the copperheads," they said, and there was evidence of how nature lent a hand to plan another cattle lot.

Success Stories

By Thanksgiving Day most of small game season for that year was history, so our hosts recited the success they'd had afield, and it seemed impressive. "We salted down the squirrel and Mom fried the rabbits and canned them," they explained. Their anticipation now, however, was for the approaching deer season. They'd get their deer again, they insisted, for after all the venison was needed to make sausage, to use as roasts and to salt, cure, and dry. When the canning shelves were filled and a deer was bagged, one was ready for winter. How truly they lived off the land!

These were days when it was beyond the realm of imagination to anticipate fresh California strawberries airlifted to an eastern market. It was a day when one did not plan on early southern potatoes if the home supply ran out in April; in fact, it was a time when seed catalogues were not relied upon extensively. Lettuce and endive seed heads, for example, were wrapped in one of Grandma's old calico aprons and stored in a spare room to dry for use as next spring's seeds.

These were days, however, when one knew and relied upon his neighbor. If one family had corn and another beans, both families had corn and beans. These were days when gratitude was evident. It took form each fall as a harvest festival, when country folk brought their first fruits to the church, arranged them in a display and, having given thanks, donated the display to those among them who were needy.

With a backdrop of experience such as this, then, a sportsman need not feel guilty at finding pleasure in being afield. "A day afield," writes a seasoned sportsman, "yields dividends beyond a trophy. . . . One would hardly imagine that the odor of dew on ripe standing corn, the smell of late-mown hay and ripening wild grapes, the tangy aroma of curing tobacco, or the busy activity of a feeding squirrel could mean so much." To find black walnuts abundant today in the same valley where they were discovered 50 years ago adds greatly to the hunt; it affirms that Providence is much today as it was then.

It is inevitable that the modern outdoorsman who was exposed to the rigors of the rural past will feel intimately bound to the soil; he knows he still lives off it. Because game is a part of the earth's bounty, he finds that the returns from a day afield with dog and gun are three dimensional: the excitement of the hunt; the contemplated delight of stuffed garnished pheasant roasted just right, to be shared by the family circle; and, finally, the lifelong reflection stored in the scrapbook, the mind, and the soul.

Two Boys, Two Dogs, Two Rabbits

By Al Shimmel

I SAT BEFORE the fireplace and reread the two letters that had arrived with the morning's mail. Granddaughter Laura had written, among other things, that "Daddy just came in from hunting, he brought some nice quail." The blue flames from the hickory logs threw a pleasant warmth against my sprawled legs. It did not seem possible that so many years had passed since I first took Laura's father hunting.

The second letter proposed a series of GAME NEWS articles under a heading, "When the Red Gods Smiled." Could I do one? You bet I could!—but—which one?

It had been a busy summer. Glenn had arrived at his twelfth birthday on the longest day of the year. As a present, he had received the promised gun, a new lightweight 20-gauge. His first license to hunt was a promise—with some strings attached!

There were training sessions with an empty gun, for safety's sake, then live ammunition fired first at stationary, and then moving targets. There soon came a day when he hit two flying clays with successive shots. I shared his pride.

A second chore was the training of Fritz, our beagle pup. There were evenings afield when we shared the instructions and listened with pride as a chase progressed. There was the task of teaching a pup to unravel the tangled skein of scent at the checks and dodges. We sometimes heard yips of pain when the briars scratched sensitive ears. Gradually, the lessons were learned and the two—boy and dog—began to show promise of being a working team.

In August our hunting partnership was complicated again. Cousin Terry joined us. With his father serving in the army, how could I refuse? The safety lessons were repeated and sternly enforced.



THE WOODCOCK fluttered toward the alder tops . . . the load of 8s found their mark. Mac picked it up and held it till Glenn took it from him. He held it in wonderment, admiring its beautiful plumage.

Through it all, Mac, Glenn's mongrel terrier, was a constant and disgusted critic. Mac was a character. He began life with a handicap that soured his disposition. He was the product of a misalliance between two thoroughbreds, a fox terrier and a Manchester. To add insult to injury, his mistress had stepped on his tail when he was a pup and broken it. He tolerated the family, loved to hunt and was devoted to Glenn.

When the fires of October had died away, I spent an afternoon checking

alder covers. Woodcock splashings showed white on fallen leaves. On a grassy knoll under a thornapple tree, I flushed two birds.

When Saturday came, I watched my son's fingers tremble as he pinned his first license to his hunting vest. Frost glistened on goldenrod as we walked down the hill to the covert beside the creek. Mac nosed about the damp sogginess under the alders. This hunting was not to his liking, but he stubbornly persisted in his efforts. At the foot of the grassy knoll, we paused. By some quirk of fate, I saw a bird crouched for flight. Mac flushed it. Glenn's 20 came up, he fired . . . and a few dried alder leaves drifted down while the bird continued its flight.

Held In Wonderment

He looked at me, turned, and took a step. A second bird fluttered toward the alder tops. For a second it seemed to hang motionless, silhouetted against the sky. The load of 8s found their mark. The bird dropped below the puff of drifting feathers. Mac ran over and nosed the bird, sneezed and then picked it up and held it until Glenn took it from his mouth. He held it in wonderment, admiring its beautiful plumage, and then with Mac and his bird, Glenn posed for a picture. I felt the pride of a father at the success of a son. We poked about the cover for an hour but found no more birds. The frost had driven the flight south, but we were content.

On November 1, the real hunting would begin. The boys crossed off each day on the calendar, and I caught some of their eagerness.

The morning of the magic day arrived. Terry came pounding on the kitchen door a full hour before the faintest hint of dawn touched the sky. During breakfast, their eyes kept straying toward the window, searching for first light. They tried to appear calm and grown up, but the task was beyond their ability. Fritz, from his kennel beyond the garden, sensed the excitement and began a clamor that demanded attention. The boys turned to me with the look that held the unspoken wish to be gone.

It was more than a mile up the ridge to the hill farm we planned to hunt. Clothed in our warmest jackets, we leashed Fritz and walked the old woods road toward the high fields. White frost lay everywhere, but as we climbed above the 2000-foot elevation there seemed to be less bite in the air. Mac began little side excursions. Once he flushed a grouse some distance from the road, but it went unchallenged. The boys carried their guns unloaded at my insistence; only when we began to hunt seriously were they permitted to load. My hunting coat was heavy with sandwiches, apples and a big thermos of cocoa. I knew that long before noon the light interest they had given to breakfast would begin to make itself felt.

Fritz tugged at his leash in protest against restraint and the fact that Mac was free to investigate all the alluring smells around each bit of brush or tuft of grass. By the time we reached Sheep Field Gap, the sun was beginning to show above the hills. The sheep pasture had not been used for years and was beginning to be invaded by wildings from the nearby woods. A thicket of greenbriars had grown up around the spring and even climbed into the lower limbs of the white oak that guarded the overflow. Clumps of pines were springing up from seed wind-blown from the large evergreens along the western margin of the field. There were many clumps

When The Red Gods Smiled

of sweet fern, often known as mountain sage because of its pungent odor. All in all, it was ideal cover for cottontails.

We released Fritz. He gave his undivided attention to a projecting root, then wormed his way into the briars, tail whipping enthusiastically. The boys loaded their guns. Terry took a position down toward the woods while Glenn found a place where the sweet fern projected toward a clump of small pines. A flock of geese etched a wavering line across the sky, their calling coming faintly from the height.

Burst from Briars

While we were watching the birds a cottontail burst from the briars and headed across the open field in the direction of the woods below. I saw the dirt kick up behind the fleeing animal as Terry fired. The dogs, homing to the sound of the shot, hit the smoking line and were away, making the woods and pasture ring with their excited tonguing.

Twice they circled below the hill, and then the bunny headed back toward the haven of greenbriars by the spring. I saw movement at the edge of a sweet fern patch. Mac's excited yips drove the rabbit from cover into the open. I saw Terry swing and almost prayed that he would score. It seemed an eternity before I saw the cottontail flip over and kick. Terry ran to pick it up and held it high while the dogs danced excitedly.

We walked over and congratulated him. We unloaded the guns and laid them on the ground, and then while he held the hind legs I field-dressed the game. I touched his forehead with a blood-smeared finger and left a round red mark. The custom is a whimsy that has come to our hills from the German forests. The blood mark of the first kill brings the hunter success in the field and an abiding intrest in the chase. His blue eyes sparkled. He was now a hunter.

We crossed a mowing that lay between the woodlot and an abandoned



GLENN AND HIS cousin Terry, with Mac and Fritz and their two cottontails—plus a third one that belonged to "the company." It's been many years since this hunt, but it will live forever in the author's memory.

clay mine. Here the dogs routed a bunny from a form close to a forgotten mound of hay. They sight chased as it raced for the briar patches bordering the meadow brook. A U-shaped patch of woods surrounded the meadow on three sides. The dense briars into which the bunny had disappeared slowed the chase. With one of the boys guarding the edges of the woods, I walked down into the thicket to assist the dogs. At times the trail seemed completely lost to them. The banks of the brook were tunneled with a network of woodchuck burrows, and the cottontail took full advantage of them.

Suddenly, almost at my feet, not one but *two* bunnies catapulted from a den and disappeared into the briars before I could so much as raise my gun. Mac gave me a disgusted look and disappeared after the quarry. Fritz was tonguing some distance away, so we had three bunnies on the

move. I heard Glenn's gun and then his shout, "I got one." It proved to be the cottontail that Fritz was following. It had tried to sneak along the edge of the woods to gain the safety of the briars again.

We found a sheltered spot where the sun warmed the fallen needles of the pines and again performed the ancient ritual of the field. Mac was barking into a crevice between two rocks too small to admit even his slender body. We called him in.

As it was near noon we broke into the food. I'm always amazed at a boy's appetite. Where he stores all he eats is one of the mysteries of youth. I would have taken oath that my hunting coat had held enough to satisfy at least a half-dozen hearty appetites, yet it all disappeared as if by magic. The dogs begged the scraps and then curled up to rest. We drank hot cocoa and talked. I caught again the enthusiasm that was theirs at the experience of hunting. Surely this nostalgia goes back to the beginnings of the human race.

A pair of ravens planed down from the higher ridges, passing high overhead. Their widely spread primaries would have been sufficient to identify them, but they confirmed it with their hoarse croakings, like "crows with a cold." We watched till they flew out of sight and then decided to hunt back toward the lower timber lot that sat astride the low saddle of the hill.

A cottontail zipped from a mound of grass and fled away across the fall plowing. As the shots kicked up puffs of dirt, the bunny flirted his white tail and zigzagged away. We watched in chagrin, guns empty, as it continued its flight. The boys looked at each other sheepishly. Just as it reached the edge of the field, it collapsed in mid-jump and rolled over dead. The distance must have been 30 yards beyond the spot where the last shot was fired.

The dogs, which had been investigating some cover below, came running to the sound of our shots. Together we crossed above the plowed area to where the cottontail lay. Here was a mystery. We could find no evidence of a wound. Curiosity prompted us to skin the animal completely. A single shot pellet had penetrated the neck muscle and lodged at the base of the skull. Why the rabbit had gone so far before dropping is one of the strange happenings that we all experience.

We had several short chases on the way down the hill, but the warm sun, light scent and overturned leaves would have taxed older and more experienced dogs. The boys had a bunny each and one that belonged to the "company." There was a general feeling of tired satisfaction as we headed home.

At supper, they sat together on the "boy bench" behind the table and did justice to the fried bunny, homemade bread and pie. Once more they related the details of the hunt for Mom. The zest of the new experience was with them.

Strange. After more than a quarter century, the letter reading "Daddy just came home from hunting, he brought some nice quail," brings back the way it all began.

Muzzleloaders Take 65 Deer

Hunters who participated in Pennsylvania's first muzzleloader deer season in 1974 harvested 65 deer, a Game Commission survey shows. An estimated 2000 hunters took part in the three-day season December 26-28. The hunt was confined to 37 designated State Game Lands. The only firearms permitted were flintlock-ignition muzzleloader rifles. Of the 65 whitetails taken, only four were antlered deer. The remaining 61 antlerless deer included 50 does and 11 males. Nonresident hunters took 17 of the whitetails, including three of the four antlered deer that were bagged.

The Wild Turkey and His Kin

By Carsten Ahrens

BIRDS ARE unique among vertebrate animals. They are the only ones with a protective covering of feathers (which in themselves are truly unique appendages), horny beaks without teeth (giving over the work of digestion to crops and gizzards), a syrinx which makes some of them the only animals—other than man(?)—to make sweet sounds, and they surround their embryonic young with brittle, often highly-colored shells.

And the turkeys and their kin, the order of gallinaceous birds (from Latin: *gallina*, hen; *gallus*, cock) are unique among birds. The order name seems to imply that the entire group is polygamous, but that's not entirely true; some are monogamous. The order has been around for some 75 million years, and when man finally came along, many of these birds seemed to appeal to him more than birds of other groups. We can't trace man's history back far enough to dissociate him and the gallinaceous birds.

This is understandable. Like man, these birds are chiefly terrestrial (even though most of them roost in trees) and get their food from the earth. With three powerful toes fore and a lesser one aft, they scratch for a living. Their flesh is delicious and there's plenty of it. Many of them, especially the males, are outfitted in a most impressive array of colorful feathers, sometimes downright gaudy. Most are easily domesticated, and their life style—a strutting male dominating a harem of three to a score of modestly-hued hens—appeals to the chauvenism in man, as his liberated daughter is apt to point out.

Long before man came along, nature nicely divided the gallinaceous birds into seven families and distributed them equitably over the face of the earth (see table on next page).

Man, of course, changed many of these arrangements. He has tirelessly introduced exotic species where he, not nature, wanted them. Often there were predators awaiting the arrivals and soon wiped them out. The introduction of the European coturnix



Photo by Leonard Lee Rue, III

THE WILD TURKEY is a gallinaceous bird, an order that extends back many millions of years. There are seven families in this order, and nature distributed them over much of the earth's surface.

Families	Members	Original Distribution
1. *Megapodidae*	Mound Builders	Australia, Philippines
2. *Cracidae*	Curassows, Guans, and Chachalacas	Mexico, Central and South America
3. *Tetraonidae*	Grouse, Ptarmigans	N. America, N. Eurasia
4. *Phasianidae*	Quails, Partridges, Pheasants, Peafowls	Temperate-Tropical Regions of the World
5. *Numididae*	Guineafowl	Africa-Madagascar
6. *Meleagridae*	Wild Turkeys	North America
7. *Ospishocomidae*	Hoatzins	Northeast S. America

quail is a good example of love's labor lost: the birds were imported and made themselves right at home in several southern states. But the newcomers happened to be one of the few species of quail that migrates, and when migration time came, they departed and were never heard of again.

Family 1

The ten species of mound builders are birds about the size of chickens with strong, large feet. They're found from Australia to the Philippines and the assorted islands in that part of the globe. Their most unusual habit is to bury their eggs in decaying vegetation or warm volcanic sand; this relieves them of the job of incubating. Both parents are on the job to see that the eggs get neither too hot nor too cold. The incubation period for the mound builders is longer than for other birds of the order: 65 days. A turkey hen broods for a mere 28 days.

All gallinaceous birds have precocial (down-covered) young. Infant larks, sparrows, robins or wrens are blind and helpless when hatched, and for weeks thereafter need constant parental care; but the young of gallinaceous birds are bright-eyed and active as soon as they crack the shell. This ability reaches the limit with the young of the mound builders; they can fly as soon as they hatch.

Family 2

The cracids comprise some 38 species found from southern Texas to the Argentine. They are colorful, noisy, gregarious, and more arboreal than most other members of the order, for they not only roost in trees but nest there as well. All are good-sized birds and their flesh is delicious, so they are much sought after as game birds in tropical America. The curassows and guans are almost as large as wild turkeys; the raucous chachalacas are smaller, up to two feet in length.

Family 3

The grouse family includes a dozen and a half species found in the northern part of the Northern Hemisphere. While most are native to this continent, several—including the largest grouse, the black capercaillie—are at home in Europe and Asia. Here are included the sage grouse, sharptailed grouse, and prairie chicken; the ruffed grouse, spruce grouse, and blue grouse; plus the four species of the smaller, boreal, monogamous ptarmigans whose plumage is brown in the summer and white in the winter. The grouse family is unusual for its "drumming" during courtship, in having the legs and feet partly or entirely covered with feathers, in having the nostrils feathered, and in having a shorter beak than most. The whole family seems oriented to concealmant, as mottlings of grays and browns predominate.

Family 4

The phasianidae comprise the biggest and showiest family. Here belong the New World quails, the Old World quails and partridges, the pheasants,



Mallee Fowl



Great Curassow, above, Ring-necked Pheasant, below.



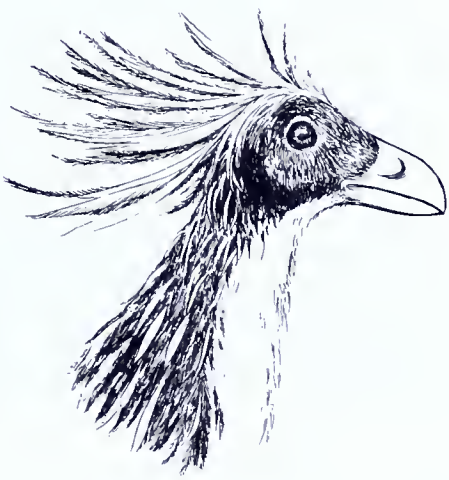
Prairie Chicken





Guinea Fowl

Hoatzin



and the peafowls.

The New World quails of the east, the plumed quails of the west coast, and 31 other species range southward to the Argentine. They lack spurs, most are monogamous, and they are gregarious after nesting. Unlike most of the order, they roost in low shrubs or on the earth. Bobwhites are unusual in that at night they form a closed circle on the ground with tails pointed inward, heads outward.

The Old World quails and partridges number almost a hundred species, which include some of the smallest gallinaceous birds. One, the painted quail, is about the size of a robin. Here are also the only four migratory species of the order . . . all the rest are stay-at-home birds. The migratory ones, all members of the genus *Coturnix*, are said to be the quail mentioned in the Old Testament (Exodus 6, 12 and Numbers 11, 31) when countless birds were captured by the hungry children of Israel in the wilderness.

The pheasants include some 50 species, many of which are so spectacularly colored that they have long been drawing cards for zoos around the world. Words can hardly do justice to a Reeves, golden, great Argus, silver, Amherst, copper, Mikado, Impeyan, or even the well-known ringnecked pheasant. At various times the latter bird was introduced unsuccessfully into America. Then in the 1880s it was established in Oregon and soon was established in most of the states of temperate America.

Probably the peacock and peahen go back farthest in man's domestication of the gallinaceous birds. He couldn't resist the sight of the male's six-foot train of metallic green and blue feathers, embellished with ornamental eye-spots. Probably as soon as our distant ancestors could lord it over lesser folks, they built fortresses, laid out lawns and gardens and imported peafowl to stroll on them in splendor, sending their harsh squawks of defiance from walls and balustrades. King Solomon himself triennially ordered ships to sail to Tarshish and fetch home peafowl along with gold, silver, apes and ivory.

However, the greatest volume of shekels have poured into farmers' coffers from the fresh eggs and flesh of a smaller, shorter-feathered member of the peafowl called the jungle fowl, from which the domestic chickens developed. Their rise began during the Bronze Age, some 6000 years ago. Back then, when man decided to settle down, he wanted eggs sunnyside up as well as roast chicken for Sunday dinner. And now the lineage of the jungle fowl of southeast Asia can be found in the modern chicken almost anywhere in the world.

Family 5

Guineafowls are the tattletales of the order. The birds are easily agitated by the sight of any stranger in their midst, and they react stridently. As a boy, I knew we needed no watch dog on the farm when we raised guineas; they were the first to warn us of an approaching tramp or to advise the chickens of a soaring hawk. They run swiftly and indefatigably, rarely taking flight except to roost in trees at night. There are seven species, but all are so smoothly rounded, so bare of head and neck, so decorated with white on blue-black and so obstreperous, that no one would mistake them for anything else. At one time we had an all-white flock, but in every other aspect they were typical of the family. I often felt that our guineas were even less than semi-domesticated, for they were more often by themselves in a nearby marshy brushland than at the farmstead. In only the most inclement weather did they return home to seek food with the chickens.

Family 6

Turkeys were strictly New World birds until the Spanish Conquistadores found them domesticated in Aztec dooryards in Mexico early in

the 16th century. Turkeys were carried to Spain, spread rapidly through Europe, and were actually reintroduced into the Colonies years later along with tomatoes and tobacco which, though indigenous to the Americas, had followed the same pattern.

The original wild turkeys have produced seven sub-species, the most important of which has been the eastern sub-species which then ranged through the English Colonies; it furnished the *piece de resistance* of the Pilgrims' first Thanksgiving dinner. Ben Franklin felt the wild turkey should have been made our national bird.

Turkeys are woodland birds that seek food on the ground and roost at night in trees. They are gregarious, polygamous, good runners and strong fliers, though they prefer to escape on foot rather than by flight. Although almost driven to extinction during the last century, they have been restored in many states largely through the efforts of hunters, who recognize in the bird a quarry that demands endurance, skill, and patience.

Family 7

The hoatzins are puzzling birds that have been pushed about by ornithologists; even the experts didn't know just where hoatzins fit into the picture. Now it has been determined that they are more closely related to the gallinaceous birds than to any other order. They are found only in the northeast corner of South America where they live in small colonies along jungle streams. They are monogamous and lay several brown-spotted white eggs in tree nests. The young are born with a pair of well-developed claws at the end of each wing, and for a while they move about in reptilian fashion. The young are good swimmers, and if one should tumble into the water, it will speedily crawl back to the nest. By the end of three weeks, the chick has lost all signs of the claws. Adult hoatzins are slender, long-necked and have a small head decorated with a tuft of erect, stiff feathers. This bird's digestive tract is adapted to use the rubbery leaves of the arum plant, which makes up its entire diet.

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After the Buck Season

By Chuck Fergus
PGC Information Writer



CONTROLLED ANTLERLESS SEASONS are the only way to regulate the size of Pennsylvania's deer herd, keeping it in balance with available food supplies.

THE SECOND DAY of 1974's antlerless deer season found me working a ridge in southern Juniata County. I'd hunted in the area the first day of buck season and seen over 30 does. Bucks had been taken all around me, too, so I knew there were plenty of deer in the vicinity. But a lot of folks had been in the woods that day moving the deer, and now it was already past 2 o'clock and I had yet to see a deer or even another hunter.

The sun went behind gray clouds and it got colder. I kept on the move, walking a few steps, stopping and scanning the hollows beneath me. Nothing.

Monday—the first day of antlerless deer season—had been rainy. In half a day of hunting I'd seen five hunters and no deer. Soaked by noon, I left the woods and pinned my hopes on Tuesday. Now Tuesday was almost gone. There was no action on the ridge, so I decided to go back to the car and hunt near it. I walked the two miles back to Route 850 where I'd parked.

Refreshed by a sandwich and a swig of cold water, I left the car and started up the mountain. I figured on going most of the way upslope and posting till sunset. As I hoisted myself over a log, a movement caught my eye. Level with me and about 75 yards away were four deer trotting uphill.

Winded by the climb, I slapped my left hand palm-down on a nearby tree trunk and rested the rifle across my wrist. I found the trailing doe in the scope and tried to keep the cross-hairs on her shoulder as she moved uphill. It was now or never, I thought, and tightened on the trigger. The 9x57mm Mauser carbine bucked.

I'll admit to having a few second thoughts when I looked down at the doe stretched out in the leaves. But a deer is an animal, in spite of all the anthropomorphizing that goes on in

the press and movies, and you shouldn't humanize one. Also, the act of harvesting and then utilizing the individual animal is the basis for Pennsylvania's deer management program.

I was happy to have had a day in the woods and to have taken a deer. The venison would come in handy. Sure, returning home empty-handed would have disappointed me a little, but I hope I wouldn't have felt like the world had come to an end. In the next couple days I was to find that many other persons attach a lot more importance to whether they, as individuals, take a deer.

I work in the Game Commission's Division of Information & Education in Harrisburg. It's our job to tell the public about game laws, seasons, bag limits, etc., and to explain why the Commission does what it does. After the Commission opened the north-central and northwestern parts of the state for a one-day extension of antlerless deer season, our office was deluged with telephone calls. They ranged from the sublime to the ridiculous—from clear, well-thought-out questions about our deer management program to profane, emotional attacks and accusations of "discrimination" against certain counties. But almost all of the calls revealed that many hunters don't know the first thing about deer management or why we have an antlerless deer season.

A famous (or maybe infamous) slogan often heard at state game departments throughout the country is that "deer aren't the problem; people are." This means that while it's clearly possible to manage a state's deer herd, it's infinitely harder to sell the program to people—the anti-hunters, preservationists, landowners, agriculturists, amateur ecologists and, surprisingly, the hunters.

All these diverse groups have a stake in the deer herd because the animals are a natural resource that is public property. These people also have a right to know *why* the herd must be thinned each year and *why* antlerless deer must be harvested. We hope this article will provide answers to these questions.

Nature has always taken care of her own. In the past, before *Homo sapiens* came into the picture, the white-tailed deer population was held in check by a lack of food and by predators. The herd was much smaller back then, because there was not enough browse in Pennsylvania's virgin forests to support many deer. But humans consider predators to be direct competition, and we have eliminated the wolves and mountain lions which once culled the deer herd. Today, free-running dogs may reduce the deer herd in local areas, and an occasional bobcat may take a young or sick whitetail, but these predators are too few to control the herd statewide.

Nature Wasteful

Without significant predation, a deer herd multiplies until it becomes too large for its food supply. Then starvation, winterkills, parasitism, a lowered reproductive rate and disease reduce the herd. Nature will take care of her own, but in a manner we consider inhumane and wasteful. In order to manage the deer herd resource, we must provide the predation—by harvesting both male and female deer.

Deer management substitutes the sport-hunter for the animal predator. *Why?* First, because the hunter can effectively reduce the herd and thus keep it in line with available food. (Here's where antlerless deer harvests come in; more about them later.) Second, because the hunter enjoys hunting as recreation—you don't have to pay a hunter to go out in the woods and thin the deer herd. Third, the hunter uses the meat from the deer, rather than having it wasted through starvation.

Now let's get down to the *why* of antlerless deer hunting. Suppose we permitted the hunting of bucks only and didn't thin the herd by removing

females. What would happen? The population would explode, even if 80 percent of the males were taken each year.

Biologists estimate there are around 700,000 deer in our state prior to hunting season. In the fall, almost half the herd are that year's fawns, very close to 50 percent males (which are still antlerless) and 50 percent females. Among adult deer, there are two or three does for each buck. Over 90 percent of the mature does—and perhaps a quarter of the female fawns, which are now about seven months old—breed between late October and mid-December.

Over a Million

Hunters might take most of the bucks in the fall, but the herd would still be very large going into winter. Probably only a few deer would starve if January, February and March were mild. The survivors, however, would have to browse back much of the food to make it through even a mild winter. With normal breeding the following spring, the herd's size would go well over a million deer.

They would face the next winter with the deck stacked against them, as the food supply would already be overbrowsed. The deer would eat what little natural food was available, mainly stuff of low nutritional value such as laurel leaves, bark and spruce needles. Even if the winter wasn't overly harsh, some would die; a bad winter would kill many more. Supplemental feeding wouldn't help. In the first place, it's physically and economically impossible to feed tens of thousands of deer scattered over a large area for a long period of time. Second, whitetail digestive systems accustomed to browse can't utilize hay or corn alone.

In the spring, the birthrate would be lower. Many fawns would be stillborn or would die before reaching maturity. Bucks would grow spindly antlers and drop in body weight. Quality would be completely overshadowed by quantity.

Side effects of a sick deer herd—and a grossly overpopulated deer herd is truly sick—are many. Crop damage would go way up. Disease might further decimate the herd, and parasites like brainworms or coccidia would affect more animals than usual. Starving deer would eat off vegetation that provides food and cover for other wildlife such as grouse, rabbits, hares and songbirds. Car-deer accidents would increase tremendously. When you consider this waste, the consequences of *not* hunting antlerless deer are sobering.

This hypothetical situation might not arise after a two-year suspension of antlerless deer harvests; it might be three or four years coming, but it would be just a matter of time before such a predicament occurred.

True, a certain stability would set in if antlerless seasons were done away with permanently. Browse would never have a chance to regenerate to support all the deer over winter, and many would starve annually. The survivors would be small and underdeveloped, and bucks would bear smaller racks or spikes. Only a few fawns would survive each year. When nature adds the whitetail's reproductive rate to a limited food supply—and can't subtract via predation or hunting—this is the result. A "natural" result, perhaps, but certainly a wasteful one . . . and cruel by human standards.

In many ways it would be nice to return to the days of settler and Indian, when you could pick up your flintlock, head for the ridge behind the cabin and bag a deer. Back then there was no need to worry about seasons, bag limits or game manage-

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to a friend

ment. The human population was small and predators kept an adequate check on the deer herd. Forest fires and farming opened areas for browse growth, making food available to the small herd, and hunting pressure was light.

But things have changed. Those days are gone as surely as the woods buffalo and the passenger pigeon and the eastern wolf—all victims of "civilization." Because of our interference, natural resources can no longer manage themselves.

Fortunately, competent people are trained to manage our state's deer herd. Biologists employed by the Game Commission continually evaluate the herd's physical quality by examining roadkilled animals and those brought through deer check stations. Bucks are checked for antler beam diameter and number of points, deer of both sexes are weighed and the reproductive rates of females are checked. This information is collected for all counties. When correlated with the animal's age, these factors indicate local food supply quality.

Biologists are then able to build a profile of the herd's age structure, sex composition, its productivity and attrition rate (a "turnover" rate, or the yearly loss of animals to hunting, roadkills, accidents, poaching, whatever). Applying this profile to local range conditions, they can tell rather closely how many deer must be harvested from each county to balance deer numbers and food supply.

Statistics show that an average of only one antlerless permit in seven is filled in Pennsylvania. (Some permitholders take bucks in the antlered deer season, some hunt unsuccessfully and others just don't bother to go when the season opens.) So if 300 additional deer must be taken from a certain county in a given year, 7 x 300 or 2100 antlerless deer licenses are made available.

We're the first to admit that our management program isn't infallible. But if for some reason deer are underharvested in a county one year—or overharvested—we can make things right the following year by allotting more or fewer antlerless deer permits. Or, on short notice, we can extend the antlerless season statewide or in selected counties or regions. Last fall, when bad weather caused inadequate harvests in the northwest and north-central counties, the Commission opened these areas for a one-day extension.



Photo by Leonard Lee Rue, III

DATA COLLECTED at deer check stations and from roadkilled animals enables wildlife biologists to build a profile of the herd's age structure, sex composition, productivity and attrition rate.

The Game Commission's first concern is the welfare of the deer herd, which is owned by all the citizens of Pennsylvania. Satisfying individual hunters can't be the goal of our management program. As a group, however, hunters should be well pleased with the deer situation in our state.

We have a healthy whitetail herd constantly monitored by experienced biologists. We have a Game Commission with the authority and initiative to regulate deer harvests on a county or regional basis. And as a result, we've sustained some of the finest deer hunting in the nation over the last decade.

———

(For more extensive information on deer management, see "The Whitetailed Deer in Pennsylvania," available for 50¢ from the Game Commission's Division of Information & Education, P.O. Box 1567, Harrisburg, Pa. 17120.)

On Metallic Silhouettes, There's . . .

No Closed Season

By Herb Lenhart, Jr.

Photos by Cathy Lenhart



LENHART PREFERS A medium-caliber rifle such as the 25-06 or 270 for this shooting. A good trigger and accurately adjustable scope are necessities.

ARE YOU FINDING less and less space to shoot long range with your pet rifle? Do you yearn to shoot at something more exciting than paper targets? Have you reached the point where rifle shooting is being neglected because shooting off the bench doesn't appeal to you? If you answer yes to these questions, then there is a challenging sport coming for you.

It's called "metallic silhouettes," a game introduced to us by the Mexicans several years ago in the Southwest. This sport is growing in leaps and bounds all over the country. Although there are less than two dozen silhouette setups in the United States, more are being built every year. They vary from electrically operated ranges costing thousands of dollars to the simple conversion of an existing high power range for a cost of perhaps $600. Last year, the National Rifle Association adopted this match as a national competition, so those of you who are so inclined can compete for the world record (which as of this date stands at 60 hits out of 100 shots).

Basically, this is a game meant for the average shooter. It calls for a minimum amount of equipment and a small set of easy-to-enforce rules. All the equipment necessary to participate is usually found right in your gun cabinet. Compared to other shooting sports, it is relatively inexpensive. This game is a little like

reloading. You don't reload to save money, you reload so that you can shoot more. Thus, there is a tendency here to graduate to target triggers, stock variations, and heavier barrels. But in spite of this trend, respectable scores are made with standard factory rifles such as the Remington M700, which seems to be the most-favored action of experienced silhouette shooters.

Metallic targets are four different game bird and animal silhouettes cut from heavy, hardened steel plate and set up in banks of five each at different distances. The closest target is the prairie chicken at 200 meters, or 219 yards. Following are the javelina at 327 yards, the turkey at 421 yards and the desert sheep at a barrel-stretching 547 yards, or 500 meters. (You fellows who shoot woodchucks at 500 yards regularly can now prove to disbelievers that it can be done—well, maybe some of the time!)

To make this game even more challenging, the only position allowed is standing—offhand. Any standard hunting rifle of caliber 6mm or larger, with a five-round capacity, is permitted, as is any kind of sight. Maximum weight limit is 10 lbs. 2 oz. with sights. Most ranges will not permit magnums because of the damage they do to the expensive steel targets. Magnum rifles have their place in hunting, but their sheer brute force and resulting recoil are not necessary for this game. Shooting coats, slings, and other artificial aids are not permitted.

Ideal Rifle

Usually any hit at the first three yardages will knock over the silhouette. However, it usually requires about 1000 ft. lb. of remaining energy to knock over the sheep. A 243 Winchester will do this occasionally, but not every time. The ideal rifle, in my opinion, is one of medium caliber weighing under 10 pounds, with a fine trigger, delivering a bullet with a high ballistic coefficient at reasonably high velocity and keeping recoil to a minimum. I have found that a 25-06 or 270 Winchester works well.

Each relay consists of four shooters, each shooting at a different bank of targets. They shoot a string of five shots, left to right, in a period of 2½ minutes. If 30 seconds per shot seems

MOST COMPETITORS AGREE THAT the turkey silhouettes, positioned more than 400 yards from the firing line, are the toughest targets.





AUTHOR'S SON stands beside the desert sheep silhouette to indicate relative sizes. The sheep is fired at from a distance of 500 meters—offhand! No easy shot.

like a long time, consider the problems of wind, mirage, and muzzle blast from the other rifles just about the time you are ready to squeeze off on a good hold.

In addition to the excitement generated for the shooter, there is great spectator appeal. Binoculars are helpful, but even without them spectators usually can see what is going on. The silhouette must be knocked over to count as a hit—anything else is a miss. There are no X's to count—no waiting for a shoot report to be mailed. The sight of the silhouette going down in a cloud of dust from a good hit indicated by a solid *clang* is very satisfying. Even if you are not interested in competitive shooting, this game is worthwhile because it makes you a marksman. You develop a satisfying confidence in your rifle which few "once-a-year" hunters have. Although shooting offhand at live game in the field isn't recommended for top-notch accuracy, there are times when field conditions allow only a standing position. An increased ability to hold, control breathing, and squeeze off the shot will result in less wounded game.

For shooters in western Pennsylvania, there is a silhouette range in Ridgway, Elk County, about 40 miles north of Dubois. Club president Robert Smith can be contacted at Ridgway, Pa. 15853. They have a very friendly and helpful group of shooters there.

For eastern shooters, a range is nearing completion at the "Twin S Gun Club," about 12 miles southwest of Allentown. Information on this range can be obtained from Charles Davis, club president, RD 1, Box 214, East Greenville, Pa. 18041.

Once you shoot this game and walk away muttering to yourself that you will do better next time, you'll be hooked on that fabulous game called "metallic silhouettes."

223 Black Bears Taken by Hunters

Bear hunters harvested 223 bruins during Pennsylvania's one-day season on November 25, according to the Game Commission. The 1974 harvest was below the 299 bears reported taken in the 1973 season. However, much more favorable weather conditions prevailed during the 1973 season. During the 1974 season the top bear-producing counties were Pike, 28; Monroe, 24; Clinton, 23; Centre, 21; and Cameron, 19. Resident hunters took 217 of the bears, while the other six were bagged by nonresidents. Game protectors reported that 120 of the bruins, or slightly more than one half of the total harvest, were males.

There's a Lot to be Seen on an . . .

Early Spring Walk

By David S. Bair

"THIS HAS TO BE the only country in the world where a family uses two cars to take a walk," laughed the father.

"But how else could we do it, Dad?"

"No way. But it does seem silly. Mom, you have the time to take us up, don't you?"

"I'll take you. You two dress warm. I think you're out of your mind to take that walk today."

"Well, wives don't understand why guys have to get out and watch the ice break up and the ducks and geese come back to the swamp."

"Yes, they do, it's just that they get stuck with staying home cooking."

"I'll tell you what we'll do. We'll take both cars. Eric can ride with you to the swamp, and I'll leave mine at Charlie's filling station in Hartstown. Then you can take us up to the upper end of the swamp, and we'll walk back down to Hartstown."

"Isn't that too far?"

"It's only four or five miles. It's all flat and level, and I'm in no hurry. The ice is breaking up, and I want to show my son the spring coming back to the swamp."

Two cars headed north up Route 18 out of Greenville, parallel to the old Erie Extension Canal. They stopped in Hartstown.

"Hey, Charlie, okay to park this thing over here for a little while?" the man called to his friend.

"Leave it there forever for all I care. What are you up to?"

"You know the old bit about how healthy walking is. My wife is going to drive us up to the top of the swamp. She'll take the new Espyville-Conneaut Lake hardtop and let us out on the other side of the railroad tracks. We'll walk the old tow path back down to Hartstown."

"I don't think you'll see very many people."

"No, it won't exactly be crowded. Most of the big sportsmen will be watching Sunday afternoon TV."

"Tell me what you see when you get back," Charlie called over his shoulder as he went to fill up another car.

"I will," the man answered as he joined his wife and son.

"Take the road to Linesville. Then we'll cut across on the new road that goes to Conneaut Lake and . . ."

"I know where you want to go. Is it on this side of the Bessember Railroad or on the other side? The tow path I mean."

"I think it's on the other side of the railroad tracks . . ." Eric interrupted.

Big Blacksnakes

"I think you're right," the man said. "First the railroad tracks. Then a low spot and a patch of woods. Then the tow path and on the other side of the tow path the dirt road that goes back to Hartstown. That's the country road with the big gravel pit at this end. Remember when we were looking for a few flat smooth stones last summer, and we saw those big blacksnakes? Remember the size of them?"

"I'd rather forget them. I'm glad they won't be out now. When will I see you two?"

"In three or four hours. We're going to walk four miles, and I'm going to answer questions every step of the way."



"Have fun and answer all the questions. I'll have supper ready when you get back."

"Well, Eric, we're on our own. We're in no hurry, and there's no telephones out here. No one will bother us and you can ask all the questions you want."

"What do they mean when they say March comes in like a lamb and goes out like a lion?"

"Well, like this year—warm breezes come up from the South and sort of tease us. We want to think spring is here. It's this time of year after a long hard winter that my soul cries out for spring. Do you know what I mean?"

"No, I like snow and ice and winter and snowball fights. It's fun. Spring's all right, but I like winter."

"Back to March coming in like a lamb. It means that if you have nice weather in the beginning of March, the end of March may be all snow and cold weather again. It's changeable."

"Can I carry the binoculars?"

"Sure. We're here to see whatever we can see, so keep a sharp eye open."

"Look how the snowmobiles have packed a trail on the tow path."

"Yeah, they've been running them all winter. The snow is melting and the ice is breaking up. You'll hear sounds like pistol shots. That's the ice."

"What makes the noise?"

"I don't know. It just makes it . . ."

"I know we'll see ducks and geese."

"And if we're lucky we'll see the white swans. Here are some deer tracks on the path."

"How many deer are in here?"

"That's a good question. I've counted 50 or more over on the other road behind the wire."

"Nobody can shoot them over there behind the wire. How come?"

"That's the goose management area. All game is protected over there."

"Then why do they come over here?"

"They move around. Even in hunting season they're pretty safe in the swamp, because people hardly ever go in after them. Get lost in there and you'd never find your way out, unless you had a compass."

"Have you ever walked back in there?"

"When there was snow on the ground. I followed my own tracks back out again."

"Did you go in very far?"

"Not too far. You get back there a little way following a deer trail, and the first thing you know you've lost the track. You don't know how the deer got through some of those places. Then it's time to get back out of there."

"Those are coon tracks, aren't they, Dad?"

"Any ten-year-old boy would know those are coon tracks. Here, look at this. This looks like deer danced a dainty ballet and used the tow path as a stage last night."

"There's people burning grass over there across the road, in the field beside their house. Why do they do that, Dad?"

"Some people think it gets rid of the weeds and old dead grass. I just think it stinks. But when the new grass comes in it looks pretty."

"The fire can't get over here, can it?"

"No, the canal's between us."

"Who built the canal and how come?"

To Erie by Boat

"The canal was built in the 1840s, before the railroads. It was used until the 1870s. People and freight could go from Pittsburgh to Erie by boat or canal barge. Below New Castle, they used the rivers. This was part of the Shenango Division of the Erie Extension Canal. They dug it six or eight feet deep and 40 feet wide. Down below I'll show you a turn around spot."

"How'd they dig it? What did they use?"

"They dug it by hand and used



REDWINGED BLACKBIRDS are a good indication that spring is coming to the swamp. There are many other forms of animal life—ducks, raccoons, deer, etc.—if you know where to look.

wheelbarrows and shovels, mules and carts."

"What's that way up high?"

"We're in luck. Those are white swans. We're here on the right day."

"Do they stop here to nest?"

"No, they're whistlers. They may stop over here for a day or a week, but they're on their way to the Arctic. That's where they nest, in the very northern part of Canada."

"How about the geese?"

"Some go north and some stay here. We've got our own native geese around here that stay all the time. Never leave except to go out and feed, and then they come back.

"About the canal. The railroads finally bought it when an aqueduct over Elk Creek broke in 1871. That was the end of the canal. The aqueduct carried the canal 90 feet in the air above Elk Creek, and it was never repaired. They built the railroad on the old tow path. Look, the geese are coming in. See them veer off? They must be wild. Did you hear 'em honking?"

"Dad, everything looks dead."

"The trees are grey and black now, but the first of May will see the leaves in full bloom."

"Look at the ducks. See how fast they fly. They ran on the water to take off when we scared 'em. What kind were they?"

"Yellow-eyes. See that ground pine on the island? It turns the ground all green before spring. And the evergreens stay green and beautiful all winter long."

"Dad, there's a redwinged black bird."

"Spring's coming."

"Dad, see where the beaver cut the tree?"

"I see it, Eric. What kind of a tree is it?"

"I don't know."

"It's an aspen. Take a good look at it. If you ever come up here trapping for beaver when you're older, you'll know what to look for."

"Dad, how come there's old rusty railroad spikes here in the canal tow path?"

"That's another good question. The railroad bought the canal back in the 1800s. They didn't want a canal; they wanted a railroad. The railroad that was built on this old tow path was owned by some of the steel mills in Pittsburgh. The boss man of those mills ordered slag and waste from the steel mills hauled here and dumped on the tow path to make a roadbed for his railroad train. You see, the tow path would hold a mule or horse pulling a canal barge, but not a train. There's a story told by the old-timers that one night the swamp sucked up the railroad, cars, track and everything that had been left standing at the end of the line from the night before."

"Do you believe that really happened?"

WATCH THE GEESE come in on the ice, behind the open water. Hear them talkin'? See how they glide down and set their wings, and how their tail feathers brake their flight.

"I believe it. There's a low spot in the tow path just after we cross the outlet bridge; that could be the place. Anyway, it's still sinking there. Hey, we can almost see Hartstown from here. This is part of what we came to see. Focus the glasses. Now in the open water below the dam, where it comes out of the pipe, you'll see everything. Here, let me take the glasses. Hmm . . . There's Canada geese, whistling swans, black ducks, woodies, scoters, redheads and canvasbacks . . . and some more stuff over there I can't make out. Watch the geese come in on the ice, behind the open water. Hear them talkin'? See how they glide down and set their wings, and how their tail feathers brake their flight. See the quick last flap of their wings and how they strut a few steps after they land . . ."

"You know, Dad, even a sparrow makes a lot of noise out here away from everything."

"It sure does. Even the ice melting into that black swamp water makes noise."

A pickup truck following the dirt trail along the railroad tracks stopped nearby. The driver looked out and said, "Did you guys see anything?"

Eric's Dad replied, "Just the usual things in the swamp. We walked down from the top of the tow path."

"Where's your car?"

"In Hartstown."

"I'm going back; want a ride in?"

"We sure do," Eric said.

The man let them out in Hartstown, and on the drive home they were mostly tired and silent.



"You know, Eric," his father said, "the swamp has been like it is for many years. Each spring the ducks come back and the swamp comes alive again. The Indians hunted and played there, and now we do the same thing. The great grandsons of the men that made the slag in Pittsburgh walk on that slag into the swamp to fish and hunt. In the fall the guys get rabbit, deer, pheasant, and sometimes a squirrel or two. Quite a place, isn't it?"

"Yeah, Dad, it sure is. But I wonder what Mom will have for supper."

Diet Restriction

Porcupines eat a wide variety of plant foods during the summer, but when the snowy months arrive they live almost entirely on the inner bark of trees.



There Will Never Be **Another. . .**

MINDY

By Bill Ingham

We SUSPECTED from the first that she was something special. While her littermates were brawling and tumbling all over the place, Mindy was off in a corner of the yard all by herself pointing a grasshopper. Our two children, Kathy and Mark, were as happy as could be to have a new puppy for their very own—and with very impressive papers to prove it. Their mother was a bit skeptical about the idea of having a second Irish setter around the house, and the papers that she was thinking about were newspapers . . . . on the floor. But Mindy's charm won her heart in record-breaking time.

Kelly, our two-year-old setter, adopted Mindy immediately. There never was any question as to who was boss; Mindy accepted Kelly's seniority from the start and was always happy to be with her.

Schooling began the day we brought Mindy home. We followed Richard Wolter's book, *Gun Dog*, which had proved so successful in working with Kelly. Mindy was an honor student, pointing a pheasant wing when she was only ten weeks old. She always tried hard to please and asked for no reward other than a little praise and a quick belly rub. Her training was left pretty much to Kathy and Mark, not because Dad

wasn't interested, but because the Irish setter is pretty much a one man dog even though it will love a whole family. And Mindy had more than enough love to go around for everyone.

About this time the kids started talking about Mindy smiling. I never heard of a dog smiling and didn't pay too much attention to them. After all, when you're the head of a household and have kicked around a little bit you know that dogs don't smile; in fact, there aren't too many people who do any more. Besides, kids have such active imaginations. Then one evening Mindy decided she wanted some attention from me. She sat in front of me, wagged her tail furiously, kind of scrunched up her eyes, and turned up the corners of her mouth. Dogs do smile. At least Mindy did.

By the time dog training season rolled around that first summer, Mindy was yard trained and ready for her graduate work on real birds. We took both dogs into the field and Mindy almost turned inside out with pure pleasure. She thought it was one great big picnic to play with Kelly and the kids—until Kelly turned on her, nipped her flank, and let her know in no uncertain terms that pheasant-findin' is serious business. Mindy never needed a second lesson. In fact, gentle Mindy did the same thing to one of her daughters, Brandy, several years later. To a working dog there's a big difference between romping in the fields and hunting birds, and both Mindy and Kelly were working dogs.

Actually, we never had to teach Mindy anything. She pointed the first bird she ever found in the field. While Kelly was a flash pointer, crowded birds too much and caught almost as many as we shot, Mindy was altogether different. She tiptoed up on sitting birds as if she were walking on eggs. She always honored another dog's point. She was polite. Where Kelly tried to cover a three-county area, Mindy always worked closely, carefully and flawlessly. When she hit a bird trail she would follow it to an inevitably perfect point.

Circles

Mindy had a special way of letting you know whether she was just casting or if she actually had a bird scented. Her tail wagged conventionally when casting, but it actually went in circles when she struck scent—the faster the circles, the hotter the scent.

Retrieving? Forget it. Kelly was the retriever on our team. She was the leader and said which fields would be covered. Any bird that was dropped belonged to Kelly by virtue of her seniority, and Mindy never disputed her right. Besides, I've a sneaking suspicion that she never really cared to spit out the feathers.

People always asked us how we could tell Mindy and Kelly apart. The fact is that Kelly was a much prettier dog. Where Kelly was a classically proportioned Irish lass, Mindy had short ears and a rather stubby nose—a throwback to one of her ancestors, Ike Jack Kendrick, the number one field Irish setter of all time. Their personalities were worlds apart, too; Kelly was devil-may-care, while Mindy was at all



MINDY HUNTED to perfection. Among other things, she pointed a bird in a clump of grass in a swamp—while standing belly deep in ice-rimmed water.

times a lady. Kelly's personality was so overwhelming that Mindy tended to seem kind of stupid. But she wasn't. She was just plain gentle and dignified.

Mindy and Kelly were great friends. When Mindy had puppies, Kelly cleaned them up for her and tried to nurse them. When we took Kelly away from the new mother and her babies, we had to give Kelly tranquilizers to calm her down. They were her family, too, and she was just as proud of them as Mindy was.

Most people who don't know any better think you train hunting dogs. You don't. You might refine their techniques, but you do not train them. Either a dog has it or he doesn't, and this is where breeding will tell. Actually, a good dog will train you—at least Mindy and Kelly trained us. When we finally accepted the fact that the dogs knew where the birds were better than we did, our team really began to function. Mindy and Kelly first trained me and then trained Kathy. This past year they did a pretty good job on Mark, but they both felt he could use a little more work.

Just before hunting season in 1972, Kelly was hit by a car and ended up with a hind leg in a splint. Mindy hunted alone with us that year, but her heart just wasn't in it. Her style seemed to have lost some of its bounce. Oh, sure, she did a beautiful job and we got our share of birds, but the old enthusiasm just wasn't there. There is no question in my mind that she missed her hunting partner.

Beauty and Grace

The following season the team was reunited and we had a wonderful time. We didn't grass a fantastic number of birds, but we had some mighty fine days with a few carefully chosen friends. Even the first Monday and Tuesday with their icy rain and driving wind were fun. Mindy hunted to perfection. She stalked and pointed birds with a beauty and grace that would make a field judge cry. She pointed birds that we had walked past. She pointed a bird in a clump of grass in a swamp—while standing belly deep in ice-rimmed water. She trailed a monstrous ringneck and pointed it right in front of a guest's boots. She did it with such precision that he couldn't believe a bird was there, and so he missed it when he ignored her and the bird flushed right under his feet. Mindy just went on and tried to find him another one. She found birds where

birds just were not supposed to be. She pointed and she held perfectly. It was her finest year. And her last.

Mindy died the Saturday after Christmas . . . the Christmas when Kathy gave her younger brother her most treasured possession, her half ownership of Mindy. Mindy was here one day, full of life and love—and then she was gone.

I can't explain it exactly, but our lives are different now. They're emptier and yet fuller at the same time. Mindy gave us seven wonderful years of love, fun and affection that we never would have known had she not been part of our family. We can still see her beautiful red body romping through a field of daisies; see her tail in that blurred circle just before a solid point; even feel the gentle pressure of her muzzle on our knee as she quietly told us that she thought we were something special. But I guess Mark misses her most of all. They shared many secrets. They were companions and their communication was something that only a boy and his dog can begin to understand. Even in the end Mindy was helping him to grow up, and that's always a rough thing for any youngster to do.

We'll have another puppy soon, and it will be Mark's. But we won't call it Mindy. There will never be another Mindy.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Bobwhite Quail Hunting, by Charley Dickey, Stoeger Publishing Co., 55 Ruta Court, S. Hackensack, N.J. 07606, 112 pp., large format, paperbound, $2.95. Longtime director of the National Shooting Sports Foundation, Charley Dickey "retired" to fulltime freelancing in outdoor writing. This highly readable and informative book is one of his recent contributions to the field. It's an in-depth look at the bobwhite, and the guns, shells, dogs, and techniques that lead to successfully hunting this great gamebird.

Bucks With a Bow, by Bob Kirschner, P.O. Box 153, Trafford, Pa., 15085, 104 pp., paperbound, $2.20. According to the author, 10 percent of the archers in the Keystone State take 90 percent of the deer bagged during bow season. Are you in this top tenth? If not, this book may help put you there. This manual covers scouting, equipment, clothing, deer habits, weather, hunting tips and even provides some tasty venison recipes. Kirschner is well-qualified to dispense archery tips, as he's taken many Pennsylvania whitetails with the bow, including a good number of trophy heads.

This Good Earth, ed. by Les Line, Crown Publishers, Inc., 419 Park Ave. South, New York City 10016, 256 pp., $22.50. Subtitled "the view from Audubon Magazine," this large format volume features over 150 beautiful full-color reproductions from a dozen photographers such as Dennis Brokaw, David Muench and David Cavagnaro, and text from a dozen writers including Hal Borland, John Madson and Joseph Wood Krutch. There's a breathtaking beauty in the photos of the wild places and wild creatures—and a tough-minded insight in much of the writing which reflects the battles, won and lost, by conservationists through the years. This is more than a beautiful book. It's one that will make you think.





NICE BUCK, above, was taken in 1909 on Warrior's Ridge in Huntingdon Co. James Fageley, left, and his father George. Little fellow is neighbor boy, Horace Manbeck. Photo from George Miller, Erie. Below, J. C. Shingeldecker with large deer taken at Mud Lick Camp near Caledonia in 1916. Photo from H. R. Fritz, Fairmount City.

TOM McKIVISON, Julia
coons. Largest weighe
Valley.

Days





THIS WAS THE OLD BENDERSVILLE G
were C. A. Smith, John W. Bucher, Joh
perger, Donald Garreston, Frank Garr
Fidler, Denton Bream, Chas. Bream.
retired Game Protector, Adams Co.



1936 limit of rac-
aken in Bald Eagle



Yore

SIX NICE BUCKS taken in 1929 by group from McKeesport and Clairton. Photo from C. E. Ramsden, McKeesport. Below, Louis F. Oestel, Pittsburgh, with his dogs Taitor and Spot, following a successful rabbit hunt in 1903. Photo from his daughter, Lucy Oestel.



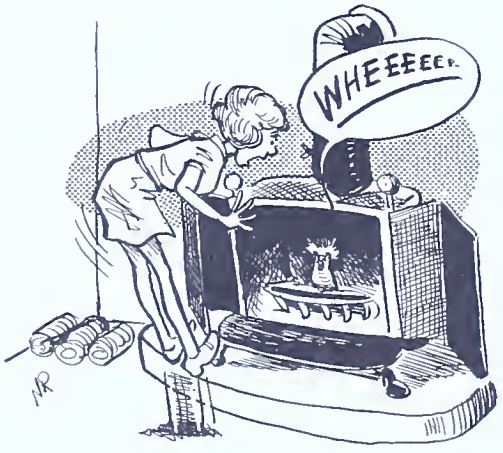
erland Co., in 1921. Hunters
a W. M. Yeatts, Chas. Raffens-
r Walters, Guy Bucher, John
fr n Sam Weigel, Arendtsville,



FIELD NOTES

Ringtailed Bears

ADAMS COUNTY – Recently I serviced a complaint of raccoons invading a corn crib. The farmer told me that the tenant's son saw a ringtail near the crib and told his mother the bears were after the corn. Adams County can't boast a black bear population, but what other county can say they have ringtailed bear? – District Game Protector G. W. Becker, Gettysburg.



Down the Stovepipe

LYCOMING COUNTY – A lady in Montoursville recently reported capturing a screech owl in her house. She had opened the door of her Franklin stove to build a fire, and the owl fluttered out and perched on the back of a chair. She caught the bird and when I released it in the wild it flew away, apparently none the worse for wear.–District Game Protector W. E. Hutson, Williamsport.

To A Deputy

YORK COUNTY – A deputy game protector died this February in his 25th year on the job. The earth did not tremble and most people did not take notice. Some maligned him, because he made some mistakes in the past, as we all do. But people who always look back and never forward don't matter much. The familiar old green Jeep that moved slowly across the hills day and night, protecting both wildlife and property, will be missed in southwestern York County. The man who drove it for long, frustrating hours, with little or no pay, will always be an inspiration to me and to all the people in conservation work who knew him. Rest well, Raymond Schroll.–District Game Protector G. J. Martin, York.

Un-posting and Posting

ERIE COUNTY – Four years ago, a man from Ohio bought a 205-acre tract of land in Elk Creek Twp. and promptly posted it. This past season, convinced by one of our local sportsmen, the owner signed up in our Safety Zone program, thus opening his land to public hunting. During the extended season in January a friend of the owner was hunting on this property and was injured in the face and neck from a shotgun. The offender fled the scene. By the time I arrived to investigate, the Safety Zone signs were down and the No Trespassing signs were back up.–District Game Protector R. W. Meyer, Fairview.

Old Sport, Modern Methods

MONTOUR COUNTY – My two sons Tim and Jim, ages 11 and 10, decided to try trapping for the first time this year. Prior to opening day, they prepared their traps and did some serious reading in the Commission's booklet on trapping. They set traps for muskrats in a couple of small streams near our home and caught four of the furbearers the first night. Of course, Dad had to give them some pointers on skinning and caring for the pelts. The next evening, I asked my wife how the trappers had done that day. She said they were in the basement. There I found Tim pelting a muskrat from that day's catch. I asked where his partner Jim was, and he said upstairs. I went up to find out why Jim wasn't sharing the skinning chores and found him in the TV room. As I entered the room, he tried to hide something and a look of guilt registered on his face. Next to him was my wife's hair dryer, in operation. I asked what he was doing. Jimmy produced a partly-dried muskrat and explained, "You said that the fur should be dry before we stretch the pelts!"—District Game Protector R. W. Donahoe, Danville.

Shrewd but Sticky Solution

ELK COUNTY – Recently, George Dahir of St. Marys had a hamster escape from a cage and run loose in his home. The hamster managed to elude capture for quite a while. Several live trapping methods were tried without success, and the one that finally worked was a large paper bag laid on its side with peanut butter smeared on the bottom of the bag. When the hamster went into the bag and began eating the bait, the bag tipped over and stood straight up with the hamster captive inside!—District Game Protector H. D. Harshbarger, Kersey.



The Debators

FRANKLIN COUNTY—Just as our group from the Southcentral Division arrived at the Farm Show in Harrisburg to relieve Southeast Division DGPs manning the Game Commission Exhibit, a classic "discussion" developed. DGP Ted Fox, of Lancaster County, was being advised by one fellow that something had to be done to get the deer herd back up to an acceptable level. Not ten feet away DGP Perry Hilbert, Lebanon County, was getting his ears singed by a farmer who had suffered unusually heavy crop damage this past year and wanted the herd thinned. The solution? The two gentlemen were introduced and everyone else backed off to a neutral corner to observe and enjoy the debate.—District Game Protector F. B. Clark, Fayetteville.

Hunting Pressure Non-existent

HUNTINGDON COUNTY – I thought I'd never see the opening day of a hunting season when woods and fields were not overrun with hunters. But it happened! January 20, 1975, was the opening day of our first crow season and I was unable to locate even one hunter afield in my district.—District Game Protector D. J. Adams, Saltillo.



A Couple Whoppers?

SUSQUEHANNA COUNTY – It's generally conceded that fishermen have a monopoly on exaggeration, but I think the following hunter's story will rival any angler's tale. Seems this fellow saw a deer approach a pipeline right-of-way. He sighted on the opening, waiting for the deer to cross. As the deer came to the opening, it stopped, squatted down and in one jump sprang across the opening, a distance of 30 or 40 feet, he said. Our hunter didn't even get a shot off. But his day ended well when he spied another deer running toward him, aimed for the white patch under the chin and dropped it with one shot from his open sighted 30/30—at a distance of 360 yards. – District Game Protector D. G. Day, Hallstead.

Think Conservation

SULLIVAN COUNTY—The energy situation is a major concern. We as sportsmen and conservationists should be asking ourselves what we can do. The next time you decide to go afield, think of your friend. I'll bet he or she would like to go, too. Most cars can carry two persons or more quite easily.—District Game Protector B. R. Hambley, Laporte.

Illegal Record

POTTER COUNTY – This information is for all those hunters looking for the big one! The heaviest deer recorded in Potter County during the past buck season weighed 156 lbs. and had an 8-point rack. But about two weeks prior to the season, four men killed an 8-point in the Ulysses area that weighed 172 lbs. and had a neck girth (without hide) of 28". A real sportsman provided the information necessary to prosecute them successfully.—District Game Protector R. G. Clouser, Galeton.

Half-Bushel Bushytails

LUZERNE COUNTY – Last fall I gathered about half a bushel of butternuts and the same amount of walnuts for my wife to bake with. I scattered the nuts on the roof of a shed to dry. One day my wife sent me out for butternuts to make cookies. To my surprise, I saw that the gray squirrels had stolen the butternuts and left the walnuts for us. We sure have a choosy family of squirrels in our neighborhood.—District Game Protector E. R. Gdosky, Dallas.

Happy New Year!

JUNIATA COUNTY – It was last New Year's Eve, and tracks in the snow showed where a man had shot a deer and then loaded it into his truck. After several hours of investigation, deputies Bill Hubler, George Campbell and Charles Leiter located the auto and, just at the stroke of midnight, retrieved the deer and a rifle and sewed up the case. The apprehended violator remarked, "This is a heck of a way to start the New Year." – District Game Protector R. P. Shaffer, Mifflintown.

How It Goes at Hershey Medical

DAUPHIN COUNTY – John Kreider, M.D., of Hershey is one of my deputies. Recently he requested the organs of a freshly-killed deer for use in a cancer research project. When I got a suitable roadkill, I called Doc and took the deer immediately to the medical center. He greeted me at the main entrance. We flipped the carcass onto a gurney, and he wheeled it nonchalantly up to the elevator. The doors finally opened and a woman passenger – whose eyes looked like saucers–stepped quickly aside when Doc greeted her with "Excuse me, emergency case!" Upstairs, we removed the organs, covered the deer (all except the head) and went back downstairs. Thirty minutes had elapsed, but in the elevator stood the same woman with the same perplexed expression. Doc looked at her, shrugged his shoulders, and said very softly, "You win some, you lose some." – District Game Protector J. E. Schweitzer, Harrisburg.

Big . . . Shoe . . . Foot . . . Snow!

McKEAN COUNTY – The men in "F" Troop Camp of Bloomster Hollow related the following. One of their members, we'll call him Dave, came across another hunter. The two started telling about all the game they'd seen. The stories were going along pretty well until Dave said he'd seen two snowfoot tracks. The hunter gave Dave a funny look and asked, "What kind of tracks?" Dave again said he'd seen two snowfoot tracks. The man shrugged his shoulders and walked away laughing. Much to Dave's dismay, he couldn't figure out what the man thought was so funny about "snowfoot tracks" until other camp members explained that they were called snowshoe tracks. Then it was Dave's turn to laugh.–District Game Protector D. A. McDowell, Smethport.

Hunting Season's Effect

ERIE COUNTY – Looking back at my records of roadkilled deer, before and after the deer season, I find there were 40 known kills in my district in November and only one in January.– District Game Protector A. C. Martin, Erie.

Questions and Answers

CLARION COUNTY – What's the most interesting aspect of being a game protector? It's listening to what people say when they're caught violating the Game Law. The most common question is "Why don't you get some of these guys that are *really* breaking the law?" Recently I caught a man in the act of skinning an illegal deer. When asked if he had anything to say, he replied, "Well, bunny cop, you finally got me."–District Game Protector J. G. Bowers, Knox.



Trap Now, Pay Later

ERIE & WARREN COUNTIES – One of my deputies arrested a man for trapping without a hunting license. The man said he was just trying this trapping business out for a couple of days, and if he did good at it he was going to buy a license.–District Game Protector G. E. Gibson, Corry.

Improve Habitat

BEDFORD COUNTY — What will you do now that hunting season is about over? Have you given any thought to what you could do to improve your hunting next year? Loss of habitat is one of the biggest factors in wildlife management. If sportsmen's clubs or individual sportsmen would select an area to work on for wildlife, their sport could be greatly improved by next year. If you don't own any land, I'm sure there are many landowners who would be glad to have someone do some work. If mostly over? Have you given any they let you hunt, don't you think it's a good idea to do something in return?—District Game Protector B. L. Warner, Bedford.



Early to Rise

On the first day of February, the Fish-For-Fun area opened on Clarks Creek. When I checked on fishing success that afternoon, I noticed that a woodchuck had cleaned out its burrow and taken a stroll along the creek. Could it be that a mild winter and the parade of fishermen persuaded the groundhog that it must already be mid-April? — Land Manager K. M. Zinn, Dauphin.

20-Mile Traveler

WAYNE COUNTY — A fellow had a red fox in captivity near Indian Orchard, below Honesdale. The fox, complete with collar, escaped and was caught within a month in the Tyler Hill area. This is about 20 miles away as the crow flies.—District Game Protector F. G. Weigelt, Galilee.

Matrimonial Collision

BRADFORD COUNTY — Recently, while our 82-year-old neighbor Tess Farrell was visiting, I received a call about a roadkilled deer. Tess then told us that many years ago she and her late husband were driving off to get married. En route, they hit a deer and had to take their car to a garage. While their car was being repaired, the two young people decided to visit the local Justice of the Peace and tie the knot.—District Game Protector W. A. Bower, Troy.

Two-Gun Fred

ADAMS COUNTY — While attempting to apprehend a man hunting without a license, Deputy Brodbeck found a hunter who is, I guess, the number one optimist. When the man without the license saw me, he gave his gun to his friend and tried to make a graceful retreat around a small hill (he didn't make it in time). Deputy Brodbeck approached the man with the two guns and said, "Good morning, Fred, carrying two guns today, I see." Fred answered, "Yeah! You never know just what's going to go out in front of you these days." Now for all you hunters who think there is no game, maybe you should try hunting with Fred for a day.—District Game Protector G. W. Becker, Gettysburg.

CONSERVATION NEWS

By Ted Godshall

125,652 Whitetails Taken

PENNSYLVANIA'S deer hunters recorded their second largest buck harvest in history during the 1974-75 whitetail seasons, according to reports filed with the Game Commission. Cards mailed in by successful hunters indicate 70,689 antlered deer were taken, while another 54,963 hunters in the state reported tagging antlerless deer. The total reported whitetail harvest was 125,652.

The 1973-74 figures were 70,316 antlered deer and 56,575 antlerless whitetails, for a total harvest of 126,-891.

The 1974-75 antlerless harvest was the thirteenth largest on record, and the total harvest was the seventh highest since record-keeping began in 1915.

The most recent buck harvest was exceeded only in 1967, when the record 78,268 were tagged.

Of the thirteen largest buck harvests in the state's history, twelve have occurred in the last twelve years.

Last fall, the Game Commission said it hoped hunters would harvest 73,000 bucks and 60,000 antlerless whitetails during the seasons.

Potter County, traditionally one of the best deer hunting areas in the state, led all counties in buck, antlerless and total harvests during the 1974-75 seasons. Sportsmen reported taking 4092 antlered deer in Potter and 2609 antlerless whitetails, for a total of 6701 deer from "God's Country."

Following Potter in antlered deer harvest were McKean, 2856; Warren, 2780; Tioga, 2742; and Clearfield, 2483.

Other leading antlerless harvest counties were Warren, 2453; Venango, 2337; Forest, 2275; and Bradford, 2124.

Counties other than Potter leading in total harvest for 1974-75 were Warren, 5233; McKean, 4868; Tioga, 4804; and Bradford, 4588.

The Game Commission emphasizes that all figures are actual counts of report cards filed by hunters.

JOHN A. FODOR, Pittsburgh, took this 200-lb., 11-point buck in Potter Co.



GARY R. HERSHEY, Shippensburg, collected this trophy in Cumberland County.



Fuzzy Thinking at R.E.A.

THE NOVEMBER 1974 issue of "Penn Lines," the official publication of the Pennsylvania Rural Electric Association, contains an editorial by R.E.A.'s General Manager William F. Matson which takes several state agencies, including the Game Commission, to task for unduly contributing to R.E.A.'s increased consumer electric bills.

In Mr. Matson's words, knotheaded, fuzzy thinking, bumbling bureaucrats are primarily responsible for recent increases in consumer electric rates by insisting, among other things, that R.E.A. pay what are characterized as excessive rental fees for electric line rights-of-way which cross public land. The Commission, of course, cannot speak for other state agencies nor for the railroads, which are also scored in Mr. Matson's article. We can, however, refute those charges as they relate to our agency.

The Rural Electric Association is a group of 13 member-owned cooperatives which came into existence in 1937 by an act of the Legislature. Their purpose was and is to implement the electrification of Pennsylvania's rural areas that remain beyond economical reach of the larger public utilities. The fact that R.E.A. is required to pay rental fees for its right-of-way privileges over Game Lands is perhaps the only accurate statement contained in Mr. Matson's remarks in relation to the Game Commission. All right-of-way users, including private business, public utilities, and state, municipal and federal agencies, pay for their rights-of-way as well. Section 906 of the Pennsylvania Game Law authorizes the Commission to grant right-of-way privileges over lands acquired for its use, when in the opinion of the Commission such rights will not ". . . adversely affect game protection and propagation, and shall charge for such licenses such remuneration and damages as the Commission deems the conditions and circumstances warrant."

We think it is important to point out that the Game Commission is a public agency without benefit of tax revenues. All operating expenses must be offset by income generated from Commission programs. The sale of hunting licenses remains our major source of income. Timber sale revenues, mineral leases, fines, and right-of-way fees make up the remainder. The fees charged for right-of-way licenses by the Game Commission are apparently considered a bargain by many private businesses and major public utilities, for they take great pains to include Game Lands in their planned corridors, sometimes relocating several miles of line to do so. All requests for licenses, of course, are not necessarily approved.

Many of Mr. Matson's charges were dealt with earlier this year when R.E.A.'s management presented a petition for consideration by the Game Commission. The petition claimed that right-of-way fees were excessive and constituted an undue burden on R.E.A.'s program costs. The charges were researched and the results presented for Commission consideration at its regularly scheduled June meeting.

Total—$1798.75

Of the 13 petitioning cooperatives, 10 held licenses for rights-of-way over Game Lands. The total number of licenses held by R.E.A., state-wide, up to June of 1974 amounted to 44. Total annual payments for the 44 licenses amounted to $1,798.75. The largest total payment any one cooperative was required to pay for its individual licenses was $408 for nine licenses assigned to Jefferson Rural Electric. Bedford Rural Electric Cooperative was next with a total payment of $300 for six licenses and Central Elec-

tric Cooperative was third with a total payment of $212.50 for 11 licenses. All fees were based on actual acreage occupied by the rights-of-way.

The seven remaining co-ops held licenses for total amounts ranging from $200 to $87.50, and, as indicated earlier, three paid no fees at all. In addition, there are six licenses held by the various cooperatives which were granted without charge and for which no fees have ever been added by the Game Commission.

Based on these figures, the Commission could find no indication of an "undue burden" and R.E.A.'s petition was denied.

We are at a loss to understand R.E.A.'s continued insistence that total license payments of less than $2,000 per year are significantly increasing consumer electric rates for the 600,000 people which R.E.A. claims to serve. We note that the circulation of Penn Lines is listed at close to 100,000. If there are 100,000 billing customers on R.E.A.'s service, the total cost to each from Game Commission right-of-way fees is less than two cents per year.

In light of these facts, we suspect that Mr. Matson may be guilty of a little "fuzzy headed" thinking himself.

To refute another specific charge made by R.E.A., the Commission, when purchasing land, has never assessed a fee for a right-of-way granted to R.E.A. by a previous landowner.

We do not charge fees for rights-of-way to service Game Commission facilities, and any utility lines, R.E.A. or otherwise, that were relocated as a result of construction of an impoundment or other Commission program, were relocated on the same tract with all costs being paid by the Commission.

The Commission does not discourage or prevent maintenance of existing utility lines. All we require is that the licensee use U.S.D.A.-approved chemicals applied according to Commission standards to enhance the wildlife value of the corridors, if they are to be sprayed, or to conduct their tree trimming and brushing operations according to sound land management guidelines.

If there has been any discrimination in our right-of-way program, it has been to R.E.A.'s advantage. The cooperative, the small businessman, the private citizen, have all enjoyed right-of-way privileges at minimum allowable rates. The Game Commission recognizes the important role that the Commonwealth's rural landowners play in our public hunting programs, but as a state agency we must be even-handed in applying our rates and regulations. In light of the information presented earlier, we fail to find any condition that discriminates against or causes an undue burden to rural citizens.

We resent Mr. Matson's irresponsible charges to the contrary.

Final Summary Report For Cooperating Woodcock Hunters 1971, 1972, 1973

By Richard A. Coon
Cooperative Wildlife Research Unit
Penn State University

THE FOLLOWING information is based on the woodcock hunting experiences of an average of 292 hunters over three years, 1971-72-73. These hunters made 3395 trips on which woodcock was one of the birds sought. Hunting time involved was 12,690 hours. Cooperators flushed 13,376 birds and killed 4489.

Each hunter killed an average of 5.1 woodcock each season. This ranged from a low of 4.1 birds per

hunter in 1972, to 7.0 in 1973. The 1971 average was 4.5. From the standpoint of birds bagged per season, the best year was 1973. This was the best year from several other standpoints, also. Eighty-five percent of the hunters were successful in 1973 whereas only 75 percent were successful in 1972; likewise, it took only 2.4 hours to kill a bird in 1973 while it took 3.2 hours in 1972. Weather affects the density and rate of travel of woodcock during migration and probably has a large influence on the type and quality of hunting available.

Average of 3.9 Trips

Each hunter made an average of 3.9 woodcock trips per season, and each trip averaged 3.7 hours. Trips were slightly longer in 1972 when birds were more scarce. An average of 34 percent of the birds flushed were killed. This figure was fairly consistent, ranging from 31 to 36.5 percent in the three years.

The number of trips during which hunting dogs were used increased each year. Dogs were used on 67 percent of the trips in 1971, on 72 percent in 1972, and on 76 percent in 1973. Dogs are apparently an important part of hunting to the majority of woodcock hunters. It is interesting to look at the efficiency of hunters with dogs versus those not using dogs. It took twice as long to flush a bird when dogs were not used, and twice as long to kill a bird (4.6 hours without dogs compared to 2.1 hours with dogs). Hunters with dogs killed an average of 1.7 birds per trip compared to 0.8 birds for hunters without dogs. Apparently the chance of bagging a flushed bird does not depend on whether dogs are used, as the percentage of flushed birds killed was 36 percent for both groups of hunters.

Each year, 90 percent of all hunting trips were on privately-owned lands, and produced 90 percent of the total woodcock killed. This may be significant in terms of future status of the woodcock since privately owned land is more readily manipulated for agricultural and industrial uses rather than for game birds or other wildlife.

The most woodcock killed by any of the participating hunters was 78, taken on 16 trips, for an average of 4.9 per trip. The largest number of trips made by any one hunter during a season was 28. This hunter bagged 45 birds that season. Simply shooting a bird apparently is not of paramount importance to the hunter, for a number bagged no birds but continued making trips. One cooperator made 26 unproductive trips, but he probably had a satisfying outdoor experience just the same.

This study has been concluded and this year no woodcock survey envelopes were sent to past contributors. Your cooperation has been sincerely appreciated. It has helped give us additional insight into the status of the woodcock and woodcock hunting in Pennsylvania.

Woodcock Hunter Survey Results

	1971	1972	1973	Avg.
No. Cooperators	296	328	253	292
Percent Successful for Woodcock	80	75	85	80
Trips/Cooperator	3.6	3.5	4.6	3.9
Hrs./Flush	1.3	1.1	0.9	1.0
Hrs./Trip	3.7	3.8	3.6	3.7
Hrs./Kill	2.9	3.2	2.4	2.8
Kill Success (%)	36.4	30.9	36.4	33.7
Trips Using Dogs (%)	67	72	76	73
Trips on Private Lands (%)	91	90	91	91
Birds/Hunter/ Season	4.5	4.1	7.0	5.1

Woodcock Hunter Survey—1973

	Without Dogs	*With Dogs*
Hrs./Flush	1.7	0.8
Hrs./Kill	4.6	2.1
Hrs./Trip	3.7	3.6
Kill Success (%)	36.3	36.0
Kills/Trip	0.8	1.7
Percent of Trips	24.0	76.0

Woodcock Hunter Survey—1973

	Public Lands	*Private Lands*
Hrs./Flush	1.3	0.8
Hrs./Kill	3.2	2.3
Hrs./Trip	4.2	3.6
Kill Success (%)	40.1	35.7
Kills/Trip	1.3	1.5
Percent of Trips	10.0	90.0

A Visit to the Emergency Room



By Tom Wylie
DGP, Philadelphia County

IT WAS late August. I had just finished setting up a portable bear trap at a resident's bee yard, where a bruin had visited on the two previous nights. With any luck at all I would have the troublemaker by the next morning. It was a hot, muggy day, and as I headed home I thought how nice a cool shower was going to feel.

I had just finished my shower and was about to go into the backyard where the family was charcoaling hamburgers when the radio station interrupted its normal broadcast to ask that anyone with knowledge about snake identification contact them as soon as possible. A youngster had been bitten by a snake.

I was working in the northeastern part of the state at the time, and bears and snakes were more common than they are in the Philadelphia area.

I was dialing the radio station's number before the announcement was over. I learned a boy had been bitten, and both he and the snake were at the emergency room of a local hospital. The staff members were unable to determine whether the snake was poisonous or non-poisonous and were reluctant to administer antivenin serum until they knew it was necessary.

It was 12 miles to the hospital and I was trying to make time. I saw the State Police radar car ahead and hoped they had been informed of the situation. They had. As I approached the chase car, he pulled out, lights flashing, siren screaming, and motioned me to follow. Minutes later we pulled into the emergency entrance area, where a welcoming committee hustled me down a corridor and into the emergency room.

A youngster was sitting on one of the tables, his right hand erect. A number of nurses and doctors were there also, and several city policemen. The boy was the only one who looked calm. I went directly to him.

On his index and middle fingers I saw a series of evenly spaced tooth marks. I felt a great relief. There was no sign of the two distinct punctures surrounded by puffy flesh which are the typical mark of a poisonous snake's bite. I asked to see the snake, and a police officer pointed to a package in the corner.

I remember noting that the emergency room seemed more than a little askew. As I started to examine the

package—a metal live bait bucket enclosed in a heavy, clear-vinyl hospital bag—I could see part of the snake's body, half in and half out of the bucket. I began to loosen the ties of the bag to make a positive identification.

"Don't open the bag!" everyone in the room exclaimed.

"That won't be necessary," I said. I could see the scales on the snake's underside.

Below the anal vent they had a basket-weave overlap, unlike the straight parallel scales above the vent. That meant the snake was not a copperhead or rattler, the only two kinds of poisonous snakes found in the area. For the first time since the radio announcement, I fully relaxed.

Non-Poisonous

I turned to my anxious audience and said, "It's okay. It's non-poisonous." Again I thought it strange that there was not much of a change in any of the faces watching me. Only the youngster seemed completely calm. I glanced around the room, again noticing the upset chairs, out-of-place cabinets, and a pair of crutches in the middle of the floor.

"What happened here?" I said.

"The snake got out," one of the doctors replied in a low voice.

That's when the full impact of the situation hit me. I knew why the people had that look on their faces and why the room was in a shambles. I could visualize what had happened when a five-foot snake of unknown species got loose in a hospital emergency room. I couldn't help laughing.

Before I was able to bring myself under control and apologize for my behavior, the others also broke into grins or laughter. The tension was gone, the snake secured, the youngster was in no danger.

After things calmed down, the news photographers took their pictures and got their story. Finally, I was able to remove the reptile, a common watersnake, from the bait bucket and put it into a plastic bag. It would be useful for conducting a short course in herpetology.

Conservation officers assigned to highly populated areas often are called upon to investigate unusual situations. Many of these experiences are noteworthy. In this instance, which turned out to be nervewracking but humorous, two factors impressed me.

First of all, after being bitten the youngster had the presence of mind to capture the snake and bring it to the hospital for positive identification. This spared him the ordeal of having to take the anti-venin serum, which in some instances brings about serious and uncomfortable reactions.

The second point is rather sobering. A well-qualified medical staff working in a highly regarded hospital could not identify or tell the difference between a poisonous and a non-poisonous snake.

Only two species of pit vipers are found in the northeastern United States, the copperhead and the rattlesnake. These species have distinguishing characteristics that are present regardless of the size, shape, or color of the snake being examined.

First, the pit viper has a small indentation between the eye and the nostril on each side of the head (hence the descriptive term "pit"). This small indentation or hole is clearly visible and quite distinctive.

Second, the eye of both the copperhead and the rattlesnake has an elliptical pupil (like that of a cat), while the eye of a non-poisonous snake has a round pupil.

Third, copperheads and rattlers have straight horizontal scale plates running the entire bottom length of the body. Non-poisonous varieties do not—their scale pattern is straight from the head area to the anal vent, where it turns into a basket-weave pattern to the tip of the tail.

The rattlesnake, of course, has a set of rattles at the end of its tail.



WOODLAND THOUGHTS

BY LOU HOFFMAN
Wildlife Education Specialist

The snows are gone now, but the wind rolling off the north slope still carries a sting. Waterfowl seem to sense a weakness in those windy punches, though, and teal, pintails, blacks and a dozen other species buck the currents en route to their ancestral breeding grounds. Skunk cabbage and fiddleheads add greenery to the bottomlands, and pussy willow buds are swelling. Repetition is here, too, as these events are being re-enacted thousands of times. Yet they still catch our busy attentions, for amid the endless macadam, concrete, steel and plastic, a sense of satisfaction is derived from these wilder places and things.

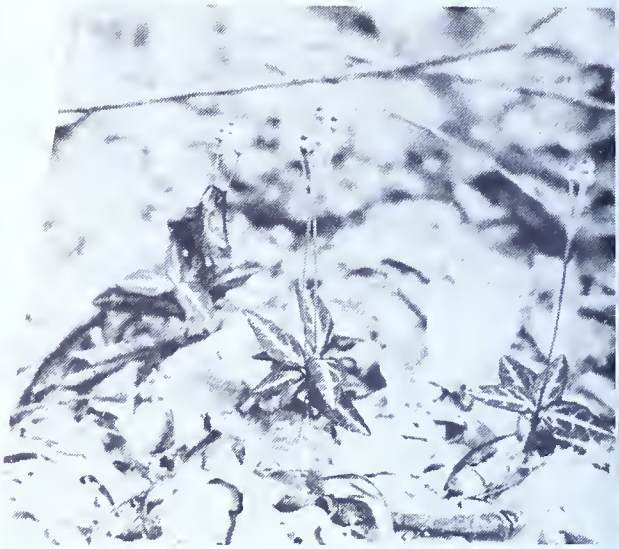
THE CHANGE from winter to spring didn't come overnight. Snowless, south-facing slopes announced spring's coming early, and in late February a wildflower warmed a chilly walk. To the not-so-observant walker, pipsissewa may signal spring, but the little evergreen actually was there in December's snow. Sap is flowing, and the sugar bush activities that go along with homemade maple toppings are in high gear. The old is enacted anew, and the cycle goes on.

The real activity of springtime centers around the lakes, waterways and bottomlands. Quacking, honking, gurgling and splashing highlight the migration and the coming season. Near shore the puddle ducks, or dabblers, bob endlessly for food in the shallows. Mallards, blacks, baldpates and shovellers add color and form to the monotonous shoreline. Because their legs are set forward on their bodies, dabblers are able to move quite well on land as well as in the water. They feed on aquatic vegetation above and below the water's surface, also on insects, crustaceans, small vertebrates, grasses, agricultural crops and almost anything available for the taking. As a group, their ranges are large and they have successfully adapted to different wetland settings.

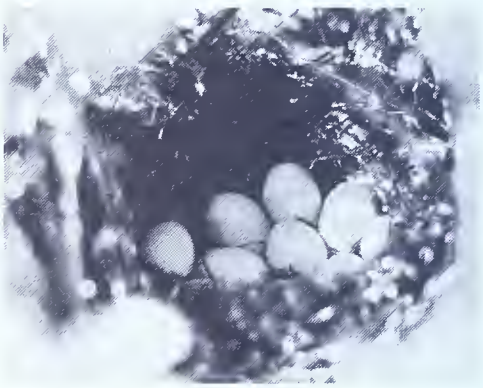
In deeper water offshore are the divers, a more specialized group of ducks. Scaup or bluebills, redheads, cans and ringnecks dive below the surface to find submerged plants. Counting even small flocks is almost impossible. About the time I arrive at a number, two or three more surface and several disappear. Among the divers are the buffleheads. Their small size and the male's white wing and head patches make them easy to identify. Usually found in small flocks, they add an interesting contrast to a dreary day.

Another small bird—not a duck—is the pied-billed grebe. A poor flier but expert diver, it differs from a duck in its pointed bill, tailless appearance and a narrow neck and head which is held erect. Unlike a true diver, it does not plunge forward when diving but submerges in an upright position, almost like a submarine. Usually seen in pairs or singly, the











THE CHANGE from winter to spring is signaled by many things — nesting birds, waterfowl, marsh marigolds, pipsissewa. . . .

pied-bill dives effortlessly for stints of 30 seconds or more.

From an isolated cove comes the echoing boom of a loon. Difficult to describe (but unforgettable once heard), the loon's call is one of my favorites. Beginning on a low note, and then rising, its civilized description looks like so—ho-oo-oo—, but cutting through the dawn it echoes like a yodeler in the Alps. I didn't see him on this particular morning, but he added a lot to my day.

Geese and spring are inseparable. Sixty-six Canadas passed overhead in their familiar V-shaped flight, their honking drifting down to me. Being monogamous, their social behavior is quite complex and has kindled many interesting legends. They disappeared over the southern horizon in a few minutes.

Things happened constantly. Male doves mixed coos and aerobatics—hopefully in the right combination—in attempts to attract unpaired females. Occasionally, one would complete a circular glide over his domain and return to perch and continue his antics. So many "commonplace" things are truly fascinating. To neglect mention of the redwinged blackbird in the spring marsh would be like lifting the crimson from a fall woodlot. Male redwings arrive on the scene before the females, stake out their territories and, perched on cattails, emit their raspy calls. Spreading and fluttering their wings, they combine color with chorus.

Visiting these marshy places each spring is a habit of mine. I need the wildness associated with these areas, even though true wilderness is lacking. (The wildlife will find that wilderness farther north.) Yet the concept of wilderness is diverse—needed by some and not by others. A pair of great naturalists, Aldo Leopold and Henry David Thoreau, said it well in many ways. Two thoughts come to mind. Leopold said . . . "There are some who can live without wild things and some who cannot. . . . I for one, cannot." In one place Thoreau's *Walden* reads: "I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived."

Through All Seasons

That, basically, says what the outdoorsman feels about the woods. The seasonal hunter, hiker, gatherer and fisherman finds goodness in his pursuit, but the real outdoorsman pursues and needs that goodness through all seasons.

Cold and dampness are found in the wetlands of early spring, and knowing that a pied-bill grebe averages 32 seconds per dive, or that there are 66 geese in a wedge is not, in itself, remarkable. But the experience of this day, and others, adds meaning and value to life and somehow makes it more complete.

Leopold commented somewhere, probably in *A Sand County Alamanac,* that wild places have value because we can see in them where we have come from, and where we are going. From a technological standpoint, that sounds disturbing; but, from an individual viewpoint, the outdoorsman knows where he has been and is going. He has been to the woods, and will return—and that is living.

Potter County Turkey Calling Contest

Potter County's second annual turkey calling championship will be held Sunday, May 11, beginning at 2 p.m. Location is the Potato City Motor Inn, on Rt. 6 midway between Galeton and Coudersport. Trophies and cash prizes will be awarded in both Pennsylvania and nonresident divisions. Callers may pre-register by contacting Ralph J. Wentz, PO Box 117, Ulysses, Pa. 16948.

SAY CHEESE, PLEASE!

By Susan M. Pajak



SUSAN PAJAK does most of her black-and-white photography with a twin-lens Mamiya C3 with f/2.8 lens, shown here. For color slides she likes a 35mm Mamiya SLR.

ONE OF THE most prickly revelations a person of the outdoors, or of any other avocation, soon learns is that not **everyone** particularly cares to do the same things you do. Furthermore, they may not even care for you!

To assume that all women and girls like to hunt or shoot firearms would be terribly naive on my part, and this very point was never brought home more vividly than when I once prodded a young lady to sign up for a certain shoot.

She halted, looked squarely into my green eyes and declared: "I don't like to shoot." Believe me, I got her message. Not even the infamous Bowie knife of 1827 could have cut into the molasses-thick silence that hung in the space between her nose and mine, and the only expression I could come up with in that moment of eternity was . . . "Oh."

But as I fumbled around for a gracious way to back out of the tacky situation, I must have mentioned the word "photography," for suddenly we were friends again. It seemed quite evident that photography was her bag.

Outdoor photography, or any facet of photography, is a mighty tough subject to discuss in one short column, because volumes have been, and still are being, written about it.

But with the nice weather coming upon us, I can visualize swarms of photobugs running about the woods taking (with their send-in-seven-box-tops camera) what they think are **salable** pictures. Sad to say, they'll probably be stuck with a stack of prints that no one wants and which in time will be thrown away. Harsh, but true. And expensive.

Most outdoor writers are also outdoor photographers to some degree and own at least two good cameras, one mainly for black-and-white photos, the other for color transparencies, or slides, although either one will take black-and-white or color film. These cameras, with an extra lens or two, usually cost from $250 up . . . and up!

Cameras that give instant pictures but no negatives are next to useless for the serious outdoor writer/photographer. You should have negatives or transparencies to work with. The normal procedure is to select certain negatives for enlarging into finished prints to illustrate a story or article.

An outdoor editor will not waste his time looking at those instant prints, yet everyone seems to be in

GIRLS, GUNS, & GAME...

a rush to buy cameras that produce them. Someone once said that the heart of a camera is its lens and this is all too true. You must have a good lens in order to get the sharp negative which will give a sharp finished picture.

About 99 percent of my black-and-white photography is done with a twin-lens camera, a Mamiya C3 professional with an 80mm, f/2.8 lens. This gives me a 2¼ x 2¼ negative from size 120 film. For color slides, I use a 35mm Mamiya SLR (single lens reflex) with a through-the-lens metering system. Both cameras can take either black-and-white film or color. (Tho' I use Mamiya, there are many other great cameras on the market, such as Leica, Nikon, Minolta, etc.)

Each of my cameras has an interchangeable lens system, a worthy point to ponder should you want to photograph something using a telephoto lens, a wide-angle lens, a macro lens, etc. You merely change the lens (and housing) instead of changing the entire camera.

Telephoto lenses "bring in" distant subjects or easily startled creatures such as birds, deer, etc., while a macro lens is used for photographing things close up—perhaps the inside of a flower. Wide-angle lenses give you a "wide" view; they take in more landscape than a normal lens.

A good tripod on which to mount the camera can run about $50 and is worth the money for certain kinds of photography. Stay away from those flimsy $10 ones, lest you find your camera face down in the mud someday because a faint breeze blew it over.

A light meter ($10), electronic flash ($60), camera bag ($50) plus lots of film (the cheapest part of your outfit), round out your basics. If you take your camera aboard a canoe, buy and fix up a waterproof, floatable protective case and tie the thing to the boat just to be on the safe side.

Keep the lens of your camera covered when not in use and never try to clean it with an old rag. Gently use a lens brush or the special cleaning paper sold in camera or optical shops.

Avoid leaving your camera anywhere in the hot sun, such as in a car trunk, and keep it out of the reach of little fingers that love to poke and pull at things new to them. If your camera needs repairs or cleaning, take it to a reputable camera repairman.

Please—the theme of this column is not to condemn any types of cameras, but neither can I promote some. I would feel just awful if you plunked down a lot of money for your budding interest in outdoor photography, only to learn that what you bought won't work out at all for you.

1975 Trappers Convention

This year's convention of the Pennsylvania Trappers Association will be held May 16, 17 and 18 at the South Mountain Fairgrounds along Route 234 west of Arendtsville, Pa. The site is about six miles northwest of Gettysburg. Meals will be available at the convention and there is room for campers and tents.

Pennsylvania Is Tops For . . .

Hiking Trails

By Les Rountree

REGULAR READERS of this column know that I've been predicting a boom in backpacking for some years. In reality, the prediction has come true already. The past five years have seen an incredible increase in the number of people who are pickin' 'em up and layin' 'em down. This is true not only on weekends, but also on extended trips as well. This spring and summer will bring the biggest surge yet for eastern packers and probably those elsewhere.

Pennsylvania real estate is perfectly laid out for backpackers of all inclinations. From the gentle, rolling hills of the southeastern slopes to the almost straight up and down domes of the Alleghenies, there is something for everyone. If traversing the state at an angle is your thing, the long, almost continuous ridges of the Appalachians that span the Commonwealth are the most spectacular mountains in the East. In fact, the Appalachian Trail is probably the most famous hiking trail in the nation and maybe in the world. The "Ap" Trail is indicated by a dotted red line on the official Pennsylvania Highway Map and can be located easily where it crosses roads. The typical wooden sign with its white indented lettering states very clearly that the trail is HERE.

By western standards, it's not a difficult trail to negotiate. There are some steep sections, to be sure, but nothing requiring mountain climbing equipment. The two extreme ends of the trail at Mt. Katahdin in Maine and Springer Mountain in Georgia are strenuous climbs, but anyone in reasonable physical condition can make them.

Incidentally, the sturdy hikers who have made the complete trek of slightly over 2000 miles belong to a rather select group. A lot of people begin the journey with great enthusiasm but few are good for the distance. Nor should you be if this is your first season out. Really long distance hiking, and that means anything over 50 miles, requires that all hikers, young or old, get in more than a spot of conditioning. A walk to the garage every day just isn't enough.

Numerous shelters exist along the Appalachian Trail and, except during very dry seasons, plenty of drinking water. It's still a good idea to carry water purification tablets. If supplies run short, many of the access points are near grocery stores. As on all hiking trails in Pennsylvania, a policy of pack-it-in/pack-it-out should be in effect. Carry trash with you until you hit a disposal area.

While thousands of people hit the Ap Trail every year, don't worry about running into herds of hikers. There will be a lot of pilgrims hiking on it this year, especially near high population areas, but with over 2000 miles of trail, there is little chance that it will be overcrowded. Besides, you'll meet some nice people on the trail with whom you'll have common interests. For a preview of what the trail offers, you might want to write to the Appalachian Trail Conference



at Box 236, Harpers Ferry, WV 25425. They offer a publication entitled, "Guide To The Appalachian Trail In Pennsylvania."

With over two million acres of state forest land in Pennsylvania, it's not surprising that many trails escape the attention of hikers who are attracted by the more-publicized Appalachian. The Horseshoe Trail is one of these, and it's a dandy. Beginning at Valley Forge State Park in Chester County, this trail winds through a rather heavily populated area of the state, yet there are long sections that offer the feeling of big woods. It connects to the Appalachian Trail just south of the Dehart Dam in Dauphin County. This trail is also marked by red dots on the official Pennsylvania map.

No Finer Map

By the way, this is a good time to insert a compliment to the makers of this map. Many agencies enter into the planning of this publication, and I don't believe there is a finer state map anywhere. The 1975 map should be available when you read this column. *Don't write to me or to the Game Commission for one, however.* Get yours from your state representative. These maps are always in short supply, but they are worth hunting for. The state gives them away but I would be willing to pay for one, they are that good. State Game Lands, State Parks, trails, State Forest Lands . . . just about everything is shown.

When walking on any trail, the hiker should walk with his eyes open and make an effort to learn more about the wilderness scene. For the less ambitious, there is the Tarkhill Forest Demonstration Area in Pike County. The access for it is about five miles south of Blooming Grove on Rt. 402. This area features two trails that wind through several types of forests. A young hardwood forest, an old hemlock stand and a 1918 white pine planting are among the highlights. Timber marking procedures are in effect here and everything is well explained with informative signs. Modern forest management techniques are greatly misunderstood by many campers, as well as the citizenry in general. Hunters, too, will profit from making this walking trip. Future game supplies depend on wise land and forest management.



BEGINNING HIKERS should test themselves and their equipment on short, close-to-home walks. As they gain experience, longer trips can be enjoyed.

The Loyalsock Trail in Sullivan and Wyoming counties passes through World's End State Park, and this is about the best place to climb aboard. For the angler, some super fishing is available along this mountain path, so be sure to pack along a lightweight fly rod. A good topo map is very useful on the Loyalsock Trail for

locating hidden side streams that contain native brookies.

The Loyalsock Trail is also shown on the official Pennsylvania map, but here is one place that the map isn't exactly right. The trail has been relocated slightly since the 1974 map was printed, so follow the trail markers and don't pay too much attention to what the map says in this case.

There are some very steep sections on the Loyalsock Trail that require strong legs and clear minds. If you're looking for something that offers a bit more challenge, this is it. The mountain top panoramas are well worth the extra work. Some of nature's finest artistry is here to look at, including Angel Falls, Loyalsock Canyon, Dry Run Vista, High Knob Overlook and the Devil's Garden. You just might see a bear on this hike—or maybe a rattlesnake. This adds to the adventure, but remember no Pennsylvania backpacker has ever been injured by a bear and I've never heard a single report of a hiker being snakebitten. For up-to-date information on the Loyalsock Trail, write to the Williamsport Alpine Club, Box 501, Williamsport, Pa. 17701.



ONE OF THE GOALS of hiking is to enjoy the outdoors—to see the animals, smell the flowers, appreciate the new views which each bend in the trail brings. You don't have to rush; relax and enjoy.

A comparatively new, 400-mile walking adventure is the Tuscarora Big Blue Trail. It connects with the Appalachian Trail just west of the Susquehanna and again in Shenandoah National Park in Virginia. You can hit this trail at U.S. Rt. 30 and the Aughwick Road, in case you aren't on foot and don't enter via the Appalachian Trail. This is an easy to moderately difficult trail and should cause no problems for anyone in reasonably good shape.

The Mid-State Hiking Trail that takes off from the Colerain Picnic area near Franklinville is a different deal. This is a moderate to difficult trail and should not be tackled by children or very old hikers. The other end of this trail is at Poe Paddy State Park in the Bald Eagle Forest. This 55-mile trail features rough but exhilarating hiking. You'll want a light pack and sturdy trail shoes.

The Bald Eagle area also has the Penn's Creek Trail, which is slated to become a bicycle trail. Eight miles of it run along an abandoned railroad right-of-way and should make for some great pedaling. You might be able to use it this summer, but there are some rough spots that require mowing, filling and grading before the public can be encouraged to bike on it. It's still good walking.

We've talked about the Susquehannock Trail so many times in this column that I won't elaborate much. This is one of my favorites. Begin at Rt. 6 near the Denton Hill Ski Area (Potter County.) You won't be disappointed. It's 85 miles long and winds through some of the most beautiful areas in the state. A hiker can't miss seeing turkeys and deer on this trail. It is

well marked with orange rectangles. Write to Potter County Recreation, Inc., Box 245, Coudersport, Pa. 16915 for more information.

All across the northcentral portion of the state is a spider's web of old logging roads and abandoned railroad beds that make for great hiking. Some of these trails require more than a casual glance to find, but if you're looking for real honest-to-goodness cross-country adventure, they are fun to look for. You'll need a good topo sheet or other accurate map, and don't forget a compass. Be sure to tell someone where you are going and when you plan to return. If you don't show up at the appointed hour, it's always nice for the search party to know where to begin looking.

In the western part of the state are a number of good, short trails that appeal to older hikers who don't want to camp overnight or casual hikers who want their nature in shorter doses.

Beam Rocks Trail in Somerset County offers a spectacular view of the Laurel Mountains, is just a mile long and is a closed circuit trail. It's off the Laurel Summit Road near the ski area. In this same region is the Wolf Rocks Trail, two miles long and featuring another overlook at the high point of the trail. It's also off the Laurel Summit Road. These two trails are both easily negotiated in sneakers.

You will need hiking shoes for the Laurel Highland Trail at Laurel Ridge State Park. This is a bit rougher and should be taken slowly. Of special interest in Somerset County is the High Point Trail at the Mt. Davis State Forest Natural Area. Beginning at the picnic area, this trail leads to the top of Mt. Davis, the highest point in the state—3213 feet above sea level. This doesn't seem like much compared with some of the 10,000-foot vistas out west, but it's like the top of the world when you're there.

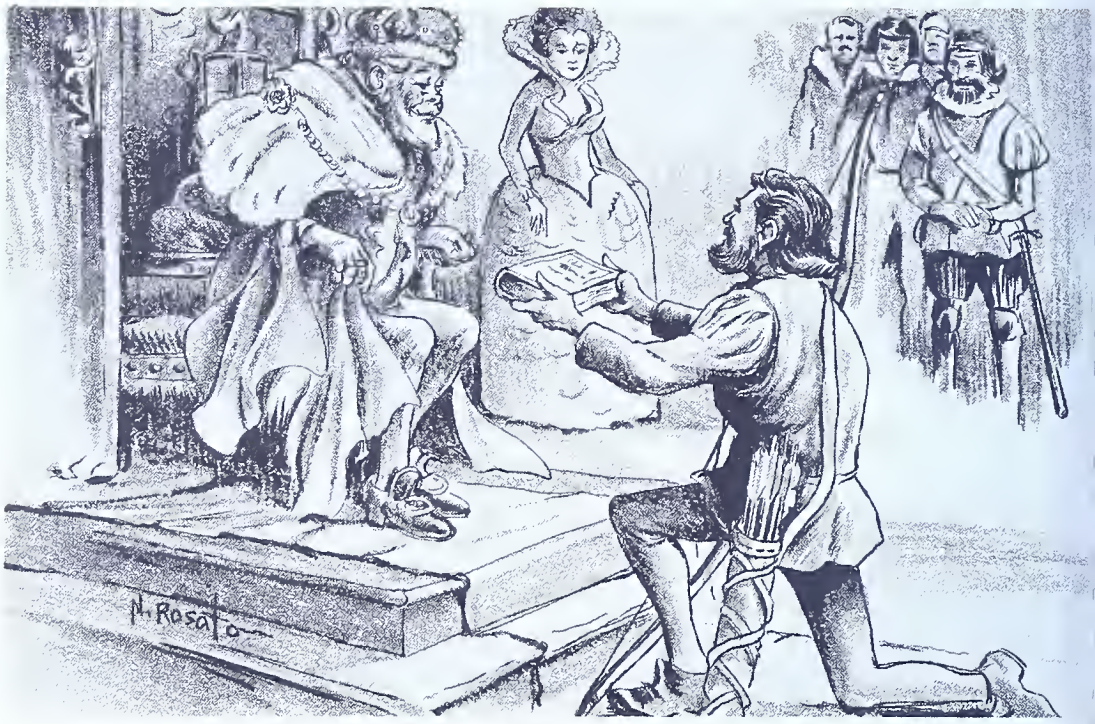
In Jefferson County is the Beartown Rock Trail that runs for two miles into the Beartown Rocks. Some of the trail is fairly steep, but autos can get to both ends. It begins at the Clear Creek State Park parking lot.



THE APPALACHIAN TRAIL is the most famous hike in the nation, maybe the world. Extending from Maine to Georgia, it challenges many backpackers each year. A significant stretch of it goes through Pennsylvania.

Most of the trails mentioned in this column are either maintained by the state or by some local hiking group. Countless other trails on private land are equally interesting and, in some cases, more accessible. As with hunters, all hikers should ask the landowner before taking off across his property. Hikers are usually welcome so long as they don't litter or damage trees or other property. Don't build fires on private land unless the landowner says you may. On state property, fires may be built along trails at shelter areas and at State Park picnic facilities. Fires may not be built on State Forest or State Game Lands without special permission. Don't cut down or place blaze marks on live trees and, above all, *don't litter.*

If there is no State Forest District office in a town near you, and if you want more information about hiking trails or State Parks, write to the Department of Environmental Resources, Parks & Forest Division, 3rd & Reily, Harrisburg, Pa. 17120. There are many trails in Pennsylvania that I have not mentioned because of space. Search them out and hike them!



ASCHAM HOPED TO INGRATIATE himself with Henry VIII by dedicating his archery book to the King. Presentation was made in 1545.

Archery's Ascham

By Keith C. Schuyler

EACH SPORT has its heroes, immortalized in fact and fancy. And, despite the emphasis given Nimrod as the symbol for hunters and hunting, Roger Ascham (pronounced *ask' 'em*) emerges from history as the one individual who did most for the sport of archery.

Nimrod was undoubtedly an archer. His total claim to fame is preserved in the Bible, Genesis X: 9-10, "And Cush begat Nimrod: he began to be a mighty one in the earth. He was a mighty hunter before the Lord: wherefore it is said, Even as Nimrod the mighty hunter before the Lord." Those are pretty impressive credentials. But that's it—period.

Ascham, on the other hand, gave us the first book written in English on archery as a sport. Roger, as far as the record shows, never loosed an arrow in anger or tried to sneak a shaft into one of the king's deer in the forests around Yorkshire, England, where he was born in 1515. In fact, he was a sickly sort. Most of the time he was too busy trying to curry favor with the crown to dream of doing anything so crude.

But don't discount Roger A's impact on archery. We owe him much. Not only did he provide a written record at a most important time in archery's history, but also his perception was such that even today his instruction fits the scene.

If not brilliant, Ascham was close to it. Only his marginal health (and he frequently alluded to it) apparently cost him a more important station as a scholarly gentleman among his peers. Although his finances were always somewhere near low tide, he did manage to ingratiate himself with Henry VIII and was tutor to Princess Elizabeth. Later he became attached to her court when she became Queen

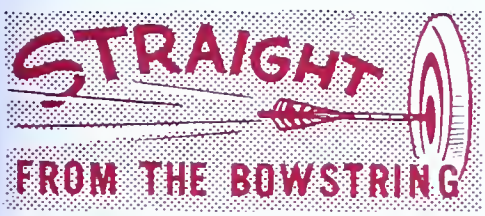
Elizabeth I.

It is interesting to note that Ascham and Izaak Walton, father of fishing, shared the same century. Ike was born in 1592, 24 years after Ascham's death. Whereas little is revealed about Walton's education, his archery counterpart is known to any who study English literature as the author of *The Scholemaster,* published two years after his death. It presented an effective method of teaching Latin, a worthy but limited historic relic when compared to his Toxophilus, *The Schole of Shootinge Conteyned in Two Bookes.*

For it was, and is, his Toxophilus that is certain to perpetuate his name for all time.

Ascham was born at Kirby Wiske, a village near North Allerton in Yorkshire, "of a family above the vulgar." He entered Cambridge University at about 15 years of age, majored in Greek, and received his bachelor's degree at age 18. "He took the degree of M.A. on Tuesday the 29th of June, 1537, when he was in the 21st year of his age, and though so young, seems already to have met with much success as a tutor." So wrote the Rev. Dr. Giles in his *Life of Ascham.*

It seems somewhat strange that a man of letters would apply himself to the sport of archery, then not considered an overly dignified pursuit. In fact, among his admirers and his critics, it was a tossup as to whether he, "spent, or, in the opinion of others, lost so much time, that those whom either his faults or his virtues made his enemies, and perhaps some whose kindness wished him always worthily employed, did not scruple to censure his practice, as unsuitable to a man professing learning, and perhaps of bad example in a place of education." It is possible that Ascham's poor health encouraged him to engage in the light physical exercise that the sport afforded.



In the politics peculiar to the monarchy of the day, Ascham was not above trying to ingratiate himself further in the favor of Henry VIII. He started the Toxophilus about 1544, hoping to present it to the king before the latter undertook the seige of Boulogne in France. Actually, Henry had a rather easy time of it; he went and was back before Ascham finished his work.

Obsequious Approach

Presentation was made in the picture gallery at Greenwich in 1545, the same year the first edition was printed. Roger drops a rung or two on the ladder of respect in his obsequious approach to the old reprobate through his dedication: "To the most gracious, and our most dread Soverign Lord, King Henry the VIII, by the Grace of God, King of England, France, and Ireland, Defender of the Faith, and of the Church of England, and also of Ireland, in earth Supreme Head, next under Christ, be all health, Victory, and Felicity."

Whether Roger had his tongue in cheek when he wrote that mouthful can't be determined, but his own deep religious convictions don't fit well with Henry's reputation. Whatever his intention, it didn't do the monarch much good. Henry died in January of 1547.

However, he liked the Toxophilus and granted Ascham an annual pension of ten pounds. That doesn't sound like much, but it is believed that, added to his income from teaching, it provided the author with enough to live comfortably if not extravagantly. When Henry died Ascham lost the pension, but it was renewed by Edward VI. He prospered even more while serving Queen Elizabeth until his death in 1568.

There was much more to Ascham,

none of it related to archery, and it is most remarkable that this well educated man with royal connections should have left an archery legacy as the most original if not the most important of his accomplishments.

Although it was only 129 years after the great English victory over the French at Agincourt, when archers won the day, the advent of gunpowder had already spelled the finish of the bow and arrow as a major combat weapon. To Henry's credit, he tried to revive and sustain interest in archery, and Ascham's book struck a sympathetic note with him. However, had Ascham failed to complete his work, it is unlikely that another could have done the job as well.

A hint of how little esteem was retained for archery is illustrated by Ascham's biographer, the Rev. Dr. Giles, writing in 1865, the year in which my set of the complete works of Ascham was printed. "He has sufficiently vindicated archery as an innocent, salutary, useful, and liberal diversion; and if his precepts are of no great use, he has only shown by one example among many, how little the hand can derive from the mind, how little intelligence can conduce to dexterity."

Possibly the most important thing about Ascham's writings is that his precepts *are* of great value even today. All who study the Toxophilus are continually amazed by this man's understanding of archery basics. Although this was the first book in English on the sport, today's archers could be taught right out of the Toxophilus.

However, understanding the language of the book, or books (since it is *conteyned* in *two bookes*), would be a bit difficult. Not only was there a certain pomposity common to writers of the day, but it was also customary to use conversation between or among characters as the vehicle for a theme. But the meat is there, no matter how much it is garnished with parsley and garlic.

Even Ascham's title gives a strong hint of his background in classic Greek. The word *toxon* means *bow*, and *philos* is *lover*. Hence, a toxophilite is a bow lover, a person who is especially fond of archery. In the book, characters are "Toxophilus," the teacher, and "Philologus," mercifully shortened to Tox and Phi for the reader.

The Royal Toxophilite Society, formed in late 1700s by Sir Ashton Lever and associates, remains a tribute to Ascham's works. Practically every author of archery books is unable to resist reference to Ascham, simply because his analytical approach has stood the test of centuries! If one could weed out the window dressing and modernize the language, there would be little missing for a basic course in archery instruction.

Much of Toxophilus is overly



ASCHAM'S OBSERVATIONS on archery, though now over 400 years old, still have value for bowmen. The basics so important to early archers still must be adhered to, if success is to be gained.

wordy, but here and there a diamond of wisdom sparkles through the painful profusion of words. "Yea, but clear weather maketh clear minds." "A Pastime, saith Aristotle, must be like a medicine." "If the young tree grow crooked, when it is old a man shall rather break it than straight it." "What great men do, be it good or ill, mean men commonly love to follow. . . ." "And thus fear is ever worse than the thing feared . . ." ". . . nature maketh a man apt; and knowledge maketh a man cunning."

97-Page Convincer

It took Ascham some 97 pages for Toxophilus just to convince Philologus that the former should teach him how to better shoot the bow. Philologe, as he is called in the text by his conversationalist, is a physician. Toxophile, as he is addressed, excites his interest in better shooting, but Tox has a bit of trouble convincing him that it is a good idea. Philologe reasons that because it is easier to shoot wide of the mark, it is the wiser man who takes this course since no one can hit it every time.

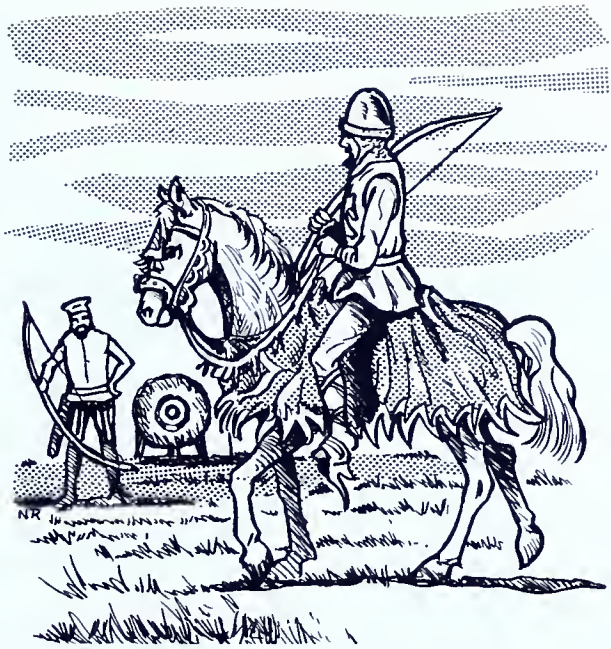
"To shoot wide is a thing possible, and therefore, as you say yourself, of every wise man to be followed. And as for hitting the prick (target), because it is unpossible, it were a vain thing to go about it in good sadness (seriousness)."

Tox finally has to agree with him, but Phi does a turnabout to convince his friend that it is, after all, worthwhile.

"Therefore, seeing perfectness itself is an example for us, let every man study how he may come nigh it, which is a point of wisdom, not reason with God why he may not attain unto it, which is vain curiosity."

The two finally agree that they shall get together so that Phi might avail himself of the greater knowledge in shooting the bow that his friend possesses. It provides the setting for Book II.

The second book might stand by itself as an instruction manual—even though it's 430 years old!



ENGLISH ARCHERS had won the day over the French at Agincourt, in the century before Ascham wrote his book, yet in that time the advent of gunpowder had essentially spelled the finish of the bow in warfare.

Phi. What is the chief point in shooting, that every man laboureth to come to?

Tox. To hit the mark.

This simple statement is a refreshing switch from the involved literary side excursions in Book I. Ascham cannot resist occasional drifts into ponderous paragraphs, but for the most part he sticks to the subject.

He explains that the weather and the mark (target) are common problems to all archers. To overcome shooting problems, the archer must direct himself to the essentials. "Standing, knocking, drawing, holding, loosing, whereby cometh fair shooting, which neither belong to wind nor weather, nor yet to the mark; for in a rain and at no mark, a man may shoot a fair shoot." Although the five basic essentials mentioned above have been improved upon, they do encompass the steps to shooting in proper sequence.

One of the purest truisms in archery is covered early, ". . . and he that will not know his fault, shall never amend it."

Ascham covers all items of tackle, but some of his comments on the string are most meaningful. "An ill string breaketh many a good bow, nor no other thing half so many. In war, if a string break, the man is lost, and is no man, for his weapon is gone . . ." Ascham was aware of the difference in results between a heavy and a light bow string. "Great strings and little strings be for divers purposes; the great string is more surer for the bow, more stable to prick (hit a small mark) withall, but slower for the cast."

While his attention to the bow itself has little meaning today, some of his opinions still hold. Ascham believed that yew wood produced the best bow. Suspicious of some bowyers, he applied an old proverb of the time, "Soon enough if well enough," to their work. "For a good bow twice paid for, is better than an ill bow once broken." Bows of the time were subject to all the ills that befall natural wood in the process of drying and cracking, as well as effects of moisture and temperature changes (which have little application to today's excellent fiberglass-faced, wood-core limbs).

Ash Favored

When it came to arrows, each part received close attention, for, "A shaft hath three principal parts, the stele, the feathers and the head." The stele, which we know as the shaft, had to come from straight-grained wood of which no fewer than fifteen were listed. Ash was most favored.

Ascham considered nothing else for fletching but goose feathers, but he was particular as to the age of the goose. "The old goose feather is stiff and strong, good for a wind, and fittest for a dead shaft: the young goose feather is weak and fine, best for a swift shaft." ". . . God sendeth us good feathers, but the devil naughty fletchers."

Arrowheads of brass, iron, and stone are mentioned. Ascham goes into detail about the performance of a head as it enters the target, whether it be a man or a harmless butt. He favored the smaller head for war, ". . . the less (smaller) hole, if it be deep, is the worse to heal again; when a man shooteth his enemy, he desireth rather that it should enter far, than stick fast."

Liked Blunts

Mention of blunt heads to keep a length, or to maintain constant draw for each shot, is one of the most important facets of shooting the bow even today. Ascham liked the blunts because, in the manner of shooting the arrow on top of the hand holding the bow, it was possible to reach out with a finger to feel the end of the harmless blunt and insure that the same draw was being held each time. It appears that then as now, maintaining a constant anchor and the avoidance of creeping, *keeping a lengh withal*, was a universal problem.

Although Ascham favored learning to shoot as a child, he encouraged participation at any age. "And this I dare be bold to say, that any man which will wisely begin, and constantly persevere in this trade of learning to shoot, shall attain to perfectness therein."

So there you have it. The balance of the 163 pages containing the two books of the Toxophilus are largely devoted to philosophizing and setting forth the author's knowledge and experiences in shooting the bow. Obviously only the highlights of the work can be touched upon here, and this small dedication must fall far short of the great importance any student of archery might attach to the Toxophilus.

Like truth, once established, basic skills can only be camouflaged by words and trappings. Ascham's archery has not changed.

THE TINY ONE

By Don Lewis

Photos by Helen Lewis

AN OLD FRIEND of mine had a general store back on a dirt road a couple of miles from where I lived. Although it was right after World War II, things didn't seem so hectic, and we spent more than one summer evening discussing local affairs on the store's porch. He was a fine old gentleman and was always concerned with the appearance of his land. This led him to fight a constant war with the woodchucks that kept digging new holes each springtime.

When he learned that I was an avid chuck hunter, he offered to reimburse me to rid his apple orchard of the digging rascals. I sure didn't want pay for doing what I still consider the most fascinating type of hunting, and I was quick to promise to return and alleviate his problems. However, by the time I got around to making another visit, I'd acquired a new rifle especially designed for short range varmint work. I can't say I was a stranger to the cartridge, but it was the first time I had taken the Winchester Model 43 afield.

It was a Saturday evening and business was slow, allowing us plenty of time to set up a crude shooting table behind the store and directly across from the apple orchard. I told my friend nothing about the new rifle, except that it was adequate to cover the 125 yards to the middle of the orchard. I was busy explaining how the 6X Weaver scope worked when a chuck appeared at the far corner of the orchard.

I waited until my friend adjusted the binoculars and then dug in, ready to test the new rifle under actual conditions. Before I could squeeze off a shot, the chuck moved toward a hole and made the same mistake hundreds of his cousins had made when he stopped before entering. I froze the crosswires on his head and squeezed the trigger. The thud of the bullet along with the waving of the chuck's tail assured us that the digging crew had been reduced by one.



TOM LEETE, of Coudersport, long a fan of small cartridges, shows the result of a shot from the Savage/Anschutz chambered for the "tiny" 22 Hornet. This cartridge is deadly to perhaps 175 yards.

"That rifle really cracks," my aged friend said, bumping his ear with the heel of his hand. "I thought it was

just a 22 and didn't know you were using a high power."

"It's no high power," I answered. "Its the 22 Hornet, and it's been around for many years. Here, take a look at one of the cartridges."

After studying it for a few seconds, he replied, "For as loud as it cracks, it's sure a tiny one."

I suppose the "tiny one" is just one of the dozens of homemade names the 22 Hornet has been called over the years. Nevertheless, it was the stepping stone from the regular 22 rimfire to the sizzling 224 centerfires now on the market. It's strange, but this little cartridge hit the American market in the early 1930s, before a factory rifle was chambered for it. Opinions differ on which company first chambered for the Hornet, but most gun buffs claim Winchester was first with their 54 Model (others claim Savage took the lead with the 23D). That's all water over the dam with me: I'm just happy that the Hornet was finally mass-produced.

The Hornet made its appearance at a time when money was scarce. The cartridge was available from Winchester around 1932, and custom gunsmiths turned out a lot of Hornet chamberings in barrels with the same internal dimensions as the regular 22 rimfire. These measurements usually ran about 217 bore and 223 groove, and this could be why Winchester made the first bullets with a 223 diameter. I think this has led to an erroneous belief that all Hornet barrels are bored for the 223 bullet.



SOME HORNETS Lewis has used: M1432 Savage/Anschutz, Walther KKJ, No. 3 Ruger Single Shot, M70 Winchester, M43 Winchester, and M23D Savage. Many hunters feel the Hornet was the first truly effective varmint load readily attainable.

Back then, a few affluent shooters could afford the custom outfits in the Hornet chamberings, but most had to wait until a more reasonable factory product came along. It's easy to see why Winchester's 54, Savage's 23D and Stevens' single shot in their Walnut Hill Model sold well.

Far Cry from Rimfire

The speedy little Hornet cartridge was a far cry from the conventional 22 rimfire. Varmint hunting was not as popular as it is now, but still there was a yearning for something more potent than the 22 long rifle rimfire. Winchester did have their Winchester Center Fire cartridge, a black powder job that could push a 45-grain slug out the muzzle several hundred feet per second faster than the 22 rimfire, and their 22 WRF which was called the 22 Special in my area. With top speeds still below 2000 fps, the Hornet's 2350 fps gave the varmint hunter of that era much more than he'd had before.

Some of the older varmint shooters may want to remind me that Savage had their 22 High Power and 250-3000 cartridges on the market long before the advent of the tiny one. Actually neither of these ever caught the fancy of the varmint shooter. It could be the actual size of these cartridges turned some of the varmint shooters off. To hunters familiar with the small 22 rimfire, the transition to these fairly large cartridges was too much. When the relatively small Hornet cartridge appeared, it was more acceptable as a true varmint cartridge.

I think the claim that the first fac-

tory Hornet cartridges would hit 2600 fps was false. I'm more inclined to think in terms of 2400 fps or less. Still, this was a significant increase over the 22 rimfire or Winchester black powder cartridge. The proof lies in the fact that the little Hornet enjoyed a good bit of sales popularity.

The only real competitor for the Hornet was the 218 Bee, designed from a necked-down 32-20. Its case was a little larger, and it offered more velocity with the same bullets. But even with this edge, the 218 Bee never made the grade. As late as 1950 when the Winchester Model 43 was still available, the Bee seemed to be making some inroads on the Hornet, but the 222 Remington put a stop to that. I shot many Bees and, in all honesty, couldn't see much difference between it and the Hornet. Still, Bee advocates stuck to their guns and defended the little bottlenecked cartridge to the bitter end.

It could be the physical dimensions of the tiny one's case that contributed somewhat to its downfall. It's common knowledge that the advent of Remington's 222 sounded the death knell for both the Hornet and Bee, but had the 222 not arrived when it did, it's very likely the Hornet would have died along with the Bee. I may be pushing a point too far, but loading the Hornet case is no picnic. I used to dread starting on several hundred of the midget size cases.

In all fairness, it was not just the small size, but also the fact that the limited-capacity Hornet case required a fast burning powder that had to be weighed precisely. I found out during the years I worked with the Hornet that there was not much room for error. In such a small case, a few





LEWIS AND JERRY HARRIS gave three of the new Hornet rifles extended field tests as well as working them out on the bench for grouping and chronographing. All gave good accuracy.

tenths of a grain make a difference. Also, this tiny case does not have the capacity to handle bullets above the 45-grain weight. The slow 1-in-16 twist does not stabilize the heavier ones.

Some velocities from my tests hit above 2800 fps, but I suggest sticking with speeds much slower using 2600 fps as a maximum. I think my reasoning is sound as the Hornet is really a 150-yard outfit, with a maximum effective range of perhaps 200 yards. At these ranges, high speed is not a prime requisite, and with the physical makeup of the tiny case, going all out for sheer speed contributes nothing. My best groups came with 9.2 grains of 2400 behind a 45-grain Sierra. Velocity read out at 2497 fps.

The little Hornet never generated much success as a benchrest cartridge. Most groups will average over an inch with factory rifles, although it's possible to concoct a load for a particular gun that could stay below the inch at 100 yards. This is nothing to be concerned about, as even 1½" groups at 100 yards are still under 3" at 175, backing up what I said earlier about the Hornet being a short-range cartridge. If I had to put the

22 HORNET BALLISTIC TESTS

Avrton K-233 Chronograph

Testing by Don Lewis — Instrumental Velocity at 15 Feet

Bullet	*Load*	*Velocity*	*Extreme Variation*	*Ruger*	*Savage/ Anschutz*	*Walther*
Sierra 40 gr.	9 /2400	2534	51	1¼	1½	1¼
Sierra 40 gr.	9.8/2400	2664	57	1½	1¾	1
Sierra 40 gr.	10.6/2400	2813	16	1¾	1⅞	1½
Sierra 45 gr.	8.6/2400	2380	23	1¼	1¼	1
Sierra 45 gr.	9 /2400	2478	95	1⅛	1¼	1⅛
Sierra 45 gr.	9.8/2400	2579	40	1½	1¾	1¼
Sierra 45 gr.	10.5/4227	2366	50	1⅛	1⅛	1
Sierra 50 gr.	8 /4227	1783	131	1⅛	1¼	1⅛
Nosler 52 gr.	10.5/4227	2366	50	1⅛	1⅛	1
Sierra 55 gr.	9.5/4227	2009	32	1¼	1⅛	1⅛

NOTE: Remington cases and Remington 6½ primers were used in this testing. Group sizes are given in inches; they are an average of three 5-shot groups with each rifle.

CAUTION. The above loads are presented for information only. No responsibility for problems resulting from their use will be assumed by the author this magazine, or the Game Commission.

Hornet in an accuracy category, I'd predict 1¼" at 100 yards as a rule of thumb.

Being an ardent chuck hunter, I was saddened when the Hornet was phased out, even though much better cartridges were on the market. When I learned that Ruger was chambering their No. 3 single shot for the tiny one, my heart quickened a pace or two. To add icing to the cake, Savage brought out the Hornet in the Model 1432 Anschutz and Interarms, Ltd., of Alexandria, Va., sent me their KKJ Walther with set triggers. There are times in a gunwriter's life when something stirs the adrenalin, and the three new Hornets made a cold spring day seem very summerish.*

I'm a single shot buff, so it's understandable that my inner yearnings leaned pretty heavily toward the Ruger No. 3. However, when I fired the Anschutz and Walther, I quickly learned that they too were good shooting outfits. On top of that, each rifle showed what I thought was better-than-average workmanship.

The 1432 Anschutz carries all the features of their Model 54 rimfire. Barrel length is 24", with a 1-in-16 rifling twist. It's enhanced with a Monte Carlo stock in French walnut and the forearm has a graceful schnabel tip. My scales weighed the factory-set trigger at just over three pounds, and it is fairly clean and crisp. Overall length is a mite over 43½", and the gun weighs 6¾ pounds. The receiver is drilled and tapped (I used two Weaver No. 11 bases) and also grooved for the clamp-on mount common on 22 scopes. My only complaint is purely personal—I think the protruding clip magazine detracts a little from the Anschutz 1432's appearance.

I've already mentioned that I was somewhat taken by the Ruger No. 3 single shot. First, it's a very short outfit with a rather heavy 22" barrel that has a 1-in-16 twist. I didn't weigh the No. 3, but factory specs show it weighs around six pounds, a hefty weight for a rifle just over 38" long. For those not familiar with the

*After this article was in type, Savage announced that their Model 340, which has been available in cals. 30-30 and 22 Remington for years, now is also offered in 22 Hornet. This bolt action rifle has a 24" barrel and weighs about 7½ lbs.

Ruger No. 3, it is very similar to Ruger's well known No. 1 single shot.

The No. 3's trigger is adjustable. Even when I reduced the poundage I found little creep. Another impressive aspect of the No. 3 is the ejector system. As on the No. 1, the No. 3 tosses the empty case out in a hurry. For the varmint hunter who saves his brass, this is not a desirable feature. In high clover it's next to impossible to find any empty, let alone one as small as the Hornet. However, the "snap action" ejector can be made to function as an extractor only. This only requires removing the forearm and backing off the ejector strut adjustment screw with an allen head wrench.

The No. 3 is drilled for scope bases, but I found the three-inch spacing somewhat short and moved out four more inches on the barrel and installed a target bases. To be honest, I dug through an assortment of old target bases and found two that would level off at around 7¼". I think the long target scope enhances the thick barrel and makes a classy looking outfit.

Walther's KKJ gives the appearance of some of the stock design of yesteryear. Maybe it's the curve of the stock or the way the small cheekpiece protrudes that makes me think of some of the old muskets of my great grandfather's day. There's no question the KKJ is a unique-looking rifle. Measuring 41" in total length, this fine looking rifle weighs about 5½ pounds. The barrel is 22", magazine capacity is five, and either a single or set trigger is available.

Set Trigers on KKJ

Since I kept thinking of the old double-trigger muskets, I was happy the KKJ Model I received had set triggers. Although the KKJ can be fired by just pulling the front trigger, I suggest using the set trigger. This requires setting or cocking the rear trigger and using a gentle touch to fire the front one. Naturally, the rear trigger shouldn't be set unless the shooter is ready to fire. In case the shot can't be taken, lift the bolt handle and pull slightly to the rear, then touch or release the front trigger.



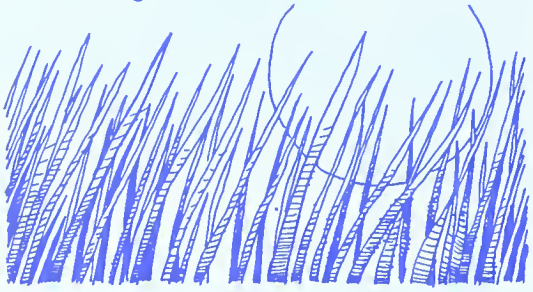
THE WALTHER KKJ's set triggers make for an easy letoff when the target is small. The 6x Weaver scope it's wearing gives good resolution at all ranges where the Hornet load is effective.

I don't think the 22 Hornet will ever make an overwhelming comeback in this age of power and speed. In fact, it's possible that only a few varmint hunters will give the Hornet a second look. This is unfortunate. To my way of thinking, the little Hornet has some very fine attributes for today's varmint hunter. With urbanization and congestion making deep inroads into hunting lands, the short range, low noise level characteristics of the Hornet should not be overlooked. Even the Hornet shell is slightly cheaper, as around 700 can be loaded from one can of 2400 powder.

I'm not trying to campaign for the little Hornet, but I do wish every varmint and turkey hunter would consider the merits of this miniature cartridge. The comeback of the Hornet is not just bringing back a bit of history for nostalgic reasons—it really is a fine varmint cartridge. I have a lot of faith in the cartridge that took me from the inadequacies of the 22 rimfire I used for years. In fact, I've already picked out several choice fields where I'll pit my shooting skill against the wily hole diggers, and —you guessed it—I'll be using the tiny one.

In the wind

chuck fergus information writer



The state of Alaska recently won the largest penalty ever levied in a water pollution case—$429,000. The fine was assessed against the Collier Carbon and Chemical Corp., a subsidiary of Union Oil Co. of California. The firm had discharged excessive amounts of ammonia 110 times from its fertilizer plant into Cook Inlet at Kenai, Alaska.—U.S. Environmental Protection Agency

The New Mexico Game and Fish Dept. is helping the Republic of Mexico establish an experimental desert bighorn sheep herd on Tiburon Island in the Gulf of California. The sheep are of a species once native to the island. Should a viable herd be established, bighorns could then be transplanted to start populations in other areas where suitable habitat exists.

—Game Conservation International

The U.S. Fish and Wildlife Service is studying evidence to determine if the timber wolf in Minnesota should be removed from the endangered species list. Research data indicates that between 500 and 1000 wolves presently live in northern Minnesota, and that the population has spread since 1965. Reclassification would change the wolf's status from endangered to threatened.

—Wildlife Management Institute

Over 250 lesser snow geese were dyed pink by Soviet scientists on Wrangel Island in Siberia, and another 200 were banded with coded orange neck collars. Observation of these geese will determine the extent to which the Siberian population intermingles with snow geese breeding in northern Canada.

—Game Conservation International

Aerosol sprays—deodorants, cleaning products, air fresheners, etc.—may be causing serious environmental damage. A National Academy of Sciences panel says that freon propellents in the sprays are breaking down the ozone layer in the earth's atmosphere. This layer shields the earth from solar ultraviolet rays which, in large amounts, are damaging to life.

— National Audubon Society

New York's State Department of Environmental Conservation has proposed changing state laws to remove coyotes from their present "pest" classification, which allows them to be hunted or killed at any time.

—From the State Capitals

Despite increased spending to safeguard natural resources and improve the nation's environment, the overall "quality of life" in the U.S. continued to move downward in 1974, according to "National Wildlife." The magazine's sixth annual Environmental Quality Index showed declines in five of seven vital resource categories. The nation fell back in the areas of wildlife, living space, soil, minerals and water resources, the survey said, while holding its own in timber and air quality. In wildlife, the EQ index concluded that suitable habitat continued to shrink last year and that full implementation of the Endangered Species Act of 1973 faltered.

—National Wildlife Federation

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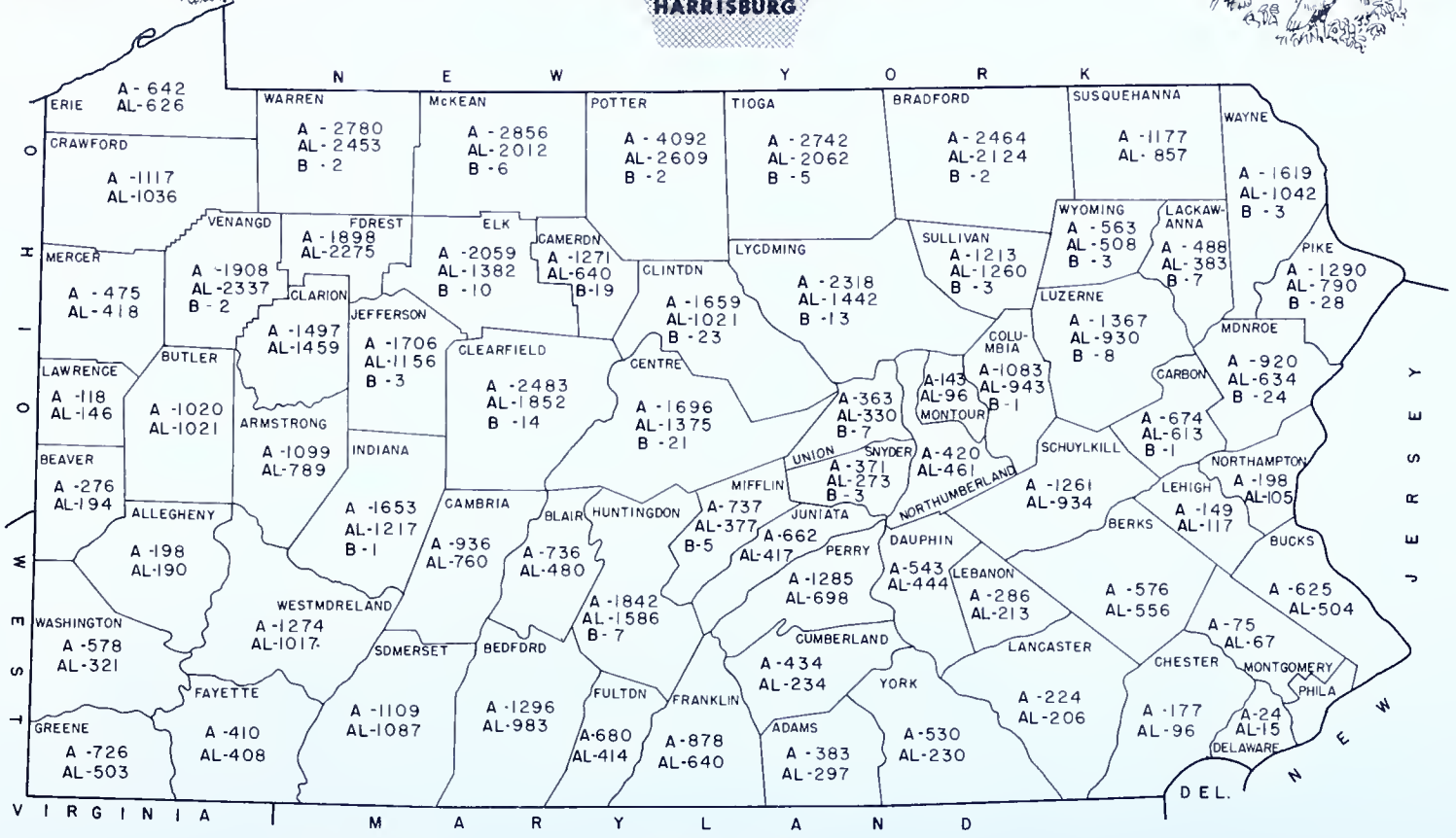
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1974
DEER & BEAR HARVEST

PENNSYLVANIA GAME COMMISSION
HARRISBURG







ANTLERED DEER (SYMBOL-A)		ANTLERLESS DEER (SYMBOL-AL)	
REGULAR SEASON	68,776		52,267
COUNTY UNKNOWN	337		298
ARCHERY SEASON	1,572		2,337
MUZZLELOADER SEASON	4		61

Grand total BEAR harvest (SYMBOL-B) 223

Grand total DEER harvest .. 125,652

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COVER PAINTING BY NED SMITH

The bobwhite quail is not as numerous in Pennsylvania now as it formerly was. The population was severely diminished by the terrible winter of 1935-36 and never recovered. Nevertheless, enough of these birds are found in some southern parts of the state to make challenging hunting for dedicated sportsmen. The first "bobwhite" calls are heard about this time of year, signaling another mating period. The usual clutch is 10-18 white eggs. The adult birds live as a pair during the nesting season and later, with their offspring, form the nucleus of a covey that remains together during the fall and winter.

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Without Foresight or Expectation

I KEEP WONDERING ABOUT hunting accidents. Why do they happen? What causes them? Can they be prevented, or at least reduced in number? Is the offender always to blame, or is the victim sometimes responsible? Or both? There cannot be an offender unless there's a victim, even when both are the same person, so the two are inextricably bound in a relationship which neither wanted. No matter where each came from, nor how long or devious their paths, for at least a brief moment in time they were within striking distance of each other. And for some reason, one of them reacted to this. Not deliberately—an accident is, by definition, an event that takes place without foresight or expectation—but with results that can be as permanent as if planned in the minutest detail and rehearsed for weeks. Sometimes they are the result of unique circumstances which cannot be deliberately duplicated. Sometimes they can't even be explained. A victim is found, the evidence indicates what probably happened—or what possibly happened—but there's no way of knowing for certain. Nevertheless, accidents happen. Not often statistically. For the 1973-74 license year (the most recent for which complete data are available), there were 19 fatal hunting accidents. This is far more than anyone wants—19 more, to be exact—but considering the total number of licensed hunters, 1,184,975, it can be seen that the incidence is actually low. It figures out to one fatal accident per 62,367 licensed hunters, or .000016%. Actually, the true percentage is slightly lower than this, for some thousands of landowners hunt on their own properties without licenses. In the 1973-74 season, 16% of the fatalities were self-inflicted, and this is just carelessness—tragic but preventable; such accidents should never happen.

Looking back, we can see that progress has been made toward safer hunting. We don't have the space to list every year, but beginning with 1915, the first for which figures are available, and showing each fifth year, the trend is obvious:

Year	*Licenses Sold*	*Fatalities*	*Licenses Sold Per Fatality*	*Percent Self-Inflicted*
1915	262,887	29	9,065	Unknown
1920	433,965	43	10,092	"
1925	525,045	52	10,097	"
1930	536,401	59	9,091	"
1935	614,929	55	11,180	"
1940	629,168	43	15,783	28
1945	713,621	37	19,100	38
1950	834,172	16	51,663	25
1955	931,013	19	48,180	47
1960	995,768	27	36,296	26
1965	953,665	30	31,788	10
1970	1,182,860	23	51,428	26
1973	1,184,975	19	62,367	16

These figures indicate that, despite what anyone says about the "good old days," so far as fatal hunting accidents go our chances are about seven times as good now as in 1915. But there's still room for improvement. Let's be positive of our targets before pulling the trigger.—*Bob Bell*

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Everyone Knows There's Many a Slip Twixt the Cup and the Lip—and as Sisley Finds Out the Hard Way, Just One Is Enough for the . . .

Susquehanna River Gobbler

By Nick Sisley

WHEN IT'S TURKEY time in the Keystone State, spring or fall, I head for Susquenita Country. Susquenita is the new name for twelve central Pennsylvania counties that have banded together to form a tourist council for the promotion of their unique mountain-oriented area.

In addition to remote mountains, trout streams galore, plus great warm water rivers like the Juniata, the North Branch of the Susquehanna, and the Susquehanna itself, and excellent hunting opportunities for a wide variety of species, Susquenita Country offers the outdoorsman some of the best, if not *the* best, wild turkey hunting in the state. I ought to know. Virtually every time I've been there, my trip has been action-packed.

My base of operations for last spring's trip was the YMCA in Renovo. I arrived with the back of my car even more cluttered than usual because turkey hunting wasn't my only objective that trip. I wanted to fish for trout in Renovo's surrounding streams each afternoon, and as soon as my spring gobbler hunt was over, I was scheduled to head for the Delaware River on a shad fishing trip. Piling enough gear for such a three-pronged outdoor adventure into my compact car was tough enough. Keeping all that equipment in some semblance of order was impossible.

After checking into my room at the Y, I studied all this gear, trying to figure out how much and what I should take to the room with me. In the end I just shook my head and decided to leave it all in the car except for one small suitcase.

A short time later I made phone contact with Leroy Good, a hunting friend who lives in nearby Westport. Leroy is a turkey caller par excellence.

"Have you been practicing up with your turkey call?" Leroy queried after we exchanged amenities.

"Nope," I retorted. "However, I was figuring we could get together and have a session this evening."

Turned out Leroy's wife Nettie was just getting ready to throw a couple of pizzas in the oven, and it wasn't long until we were gathered around his kitchen table, me scratching out sour hen yelps between pizza bites, Leroy offering constructive criticism on how to do it better.

"You shoulda been here this morning, Nick. I called up a gobbler for Nettie and she dropped it at about 25 yards with her 20-gauge. You might not believe this, but I was talking in two old gobblers at the same time. Nettie took the first one, but the second bird—it was coming from the opposite side—was a monster in comparison. I got a glimpse of him and I'm betting he goes over that magic 20-pound mark."

"Shall we go after him in the morning?" I asked. "Or should we wait a day or so to give him time to calm down?"

Never Sure

"You're never sure what the best approach is—whether to wait 'em out or try 'em again right away. I say let's try him first thing in the morning. If we can't get him to cooperate, we'll try a few other spots I have in mind. There's an old gobbler right across the West Branch that I don't think anyone has disturbed yet. We've been talking back and forth for the last ten days, but I haven't crossed the river after him yet. I have an alumi-

num boat we can cross in when the time comes. If we don't score with this big old bird tomorrow, that gobbler across the river is our ace-in-the-hole."

The pizza consumed, my turkey calling practice finished, our plans for the next morning complete, I headed back for the Renovo Y. After making sure the desk clerk understood my wakeup call was for 3:45 a.m., I was soon in a semi-fitful sleep. Visions of iridescent gobblers' heads with 8-to-10-inch beards and thrilling, gobbling sounds filled my dreams.

The phone startled me so much that for a few seconds I didn't realize where I was or where the noise was coming from. I dressed hurriedly and rushed through hotcakes and sausage in the Y dining room. I took time to gulp two cups of black coffee, hoping the caffein would remove the cobwebs and get my too-early-aroused brain out of neutral and into high gear.

Leroy was waiting and anxious, but when I looked in my car to pull my turkey hunting gear out and transfer it to Leroy's pickup, I shook my head.

"Leroy, I'm going to follow you. If I try to move all this turkey equipment into your car, I'm going to forget something, sure as heck. It would be just my luck to leave the hunting license," I said.

"Okay, Nick, no problem. But let's get going. We want to be there before daybreak."

Up Kettle Creek

We headed up Kettle Creek, then off onto a dirt road running alongside one of Kettle's small feeder streams. We wound our way up the steep mountain to the top, and as the first light of day was breaking, we pulled to a stop where Leroy and his wife had parked the day before to enjoy their good success—with not one gobbler responding, but two!

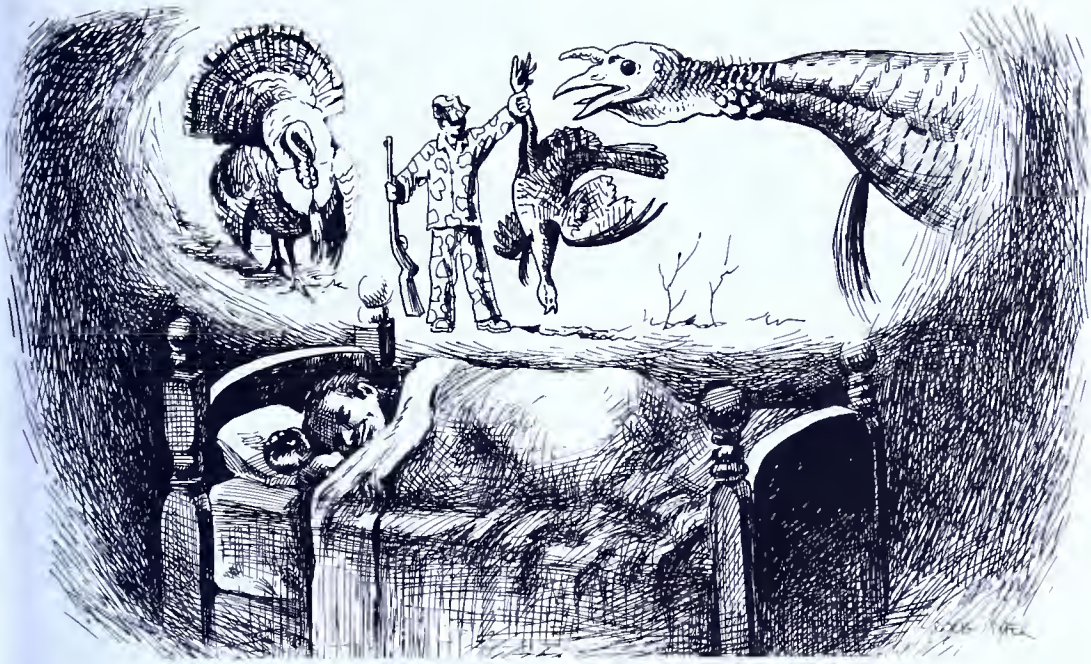
We shut the car doors quietly, then loaded our guns. Leroy's was a 16-gauge Model 31 Remington pump, an old favorite, and mine was a Remington 1100 semi-auto. When it comes to turkey, I'd never settle for anything less than a 12 bore. I shoved three heavy loads into the 1100—1⅝ ounces of No. 6 shot.

We walked out the same gas line trail that Leroy and Nettie had used the previous morning. Leroy is always reluctant to go too far into the woods in spring time when in a known turkey area. He's always afraid he'll walk into a bird and ruin the hunting he has in mind for the day. After moving a respectable distance from the car, he pauses for several minutes to give the awakening woods creatures time to calm down. Then he inserts his mouth call and sends a seductive series of hen yelps out across the mountaintops.

There was no answer to Leroy's first call and I was disappointed. From experience I knew that if a turkey had serious romance in his heart, answering the hen yelp was usually immediate. But on Leroy's second call, we did hear a response. It was far off, but what a thrill the turkey gobble provides to any ardent outdoorsman! To me, the call of the loon, Canada geese honking, and turkeys gobbling are three of the most exciting sounds in the world. The first time I hear a turkey gobble in the spring and it doesn't send a shiver of excitement up my spine, I'll know I've become all too civilized in an all too civilized world.

We made our plans in low whispers. We would retrace our steps 75 yards back along the pipeline, then take another pipeline that branched off in the direction the gobble had come from. We wanted to stay on the pipeline because we would make less noise than if we ventured straight off through the woods. Dawn was coming fast now, so we had to move as fast as possible, find a good calling spot, and do it all in the semi-darkness without making any noises that would spook the quarry.

The gobbler remained quiet the whole time we were moving. We found a natural depression that would



AFTER LEAVING A CALL FOR 3:45 a.m., I was soon in a semi-fitful sleep, visions of iridescent gobblers' heads filling my dreams.

conceal us fairly well, waited ten minutes, then started calling. We both called. Leroy with his mouth call, me with my box call. We hoped the sound of two hens would be more than an old gobbler could stand, and that he'd rush to the scene.

We may have thought we sounded super-seductive, but the gobbler didn't. We kept at it for almost an hour, but he never said a word in response. Leroy felt some other hunters had arrived in the area before us, perhaps working on the old gobbler prior to our arrival. We walked back to the road and now that it was daylight noted fresh car tracks that went on out the dirt trail past where we were parked.

"Sure as shootin' there are other hunters already in here," Leroy commented. "Gobblers are extremely wary critters. I've never had success when somebody else was calling. I like to find a place where I'm the only one in the area, and then start talking turkey."

"Well, let's go find us one of those new places you talked about last night. It's still early. We can hunt until 11 o'clock. Let's see if we can get some action," I responded anxiously.

It was nearing 10 o'clock before we got a response to our calls. Leroy was only half sure he had heard the gobble. I was positive, and urged him on. We hurried downhill, crossed a gurgling brook trout stream, then climbed the slope high enough to get away from the water noise so we could better hear the gobbler—and so he could better hear us. We got in position, Leroy behind a huge evergreen, me behind a log 50 yards ahead of him. This time Leroy did all the calling. I would have been in a good spot if the bird had come in, but this one never made another sound.

Bagging a turkey every season is certainly not a necessity for totally enjoying the sport, but this was the first day I had spent gobbler hunting where I had only heard two birds, both from a long distance. That was disappointing.

"Nick, tomorrow we'll try that river gobbler across the Susquehanna. I think we can get more action out of him," Leroy said.

"Suits me fine. I'll see you bright and early in the morning—same time, same station," I responded as we parted.

It was trout fishing that afternoon and evening, but I crawled into bed early, tired from a long day in Susquenita Country. I wanted to be well rested to pit my skills against that bird that made his home close to the river bank.

The Susquehanna is swift around Westport, and we wanted to wait until daylight before attempting to cross. When I arrived at Leroy's home, we had to load the boat, oars, find the seat cushions, and transfer all of our turkey hunting gear. We then drove a short distance to where we could get access to the river, carried the aluminum boat down to the water and loaded all our equipment. By the time we were ready to cross, there was plenty of light. I manned the oars.

Downstream

Though I pulled hard and tried to get us across as quickly as possible, the current had propelled us a hundred yards downstream before we reached the far bank. We beached the boat, trying to make as little noise as possible, donned our hunting gear, loaded our smoothbores, then took a breather. There had been frost on my windshield that morning, but the activity we had just gone through had us both sweating.

Leroy didn't want to go far before calling, hoping to get this gobbler to answer so we could pinpoint his location. If we walked too far, we could spook him and ruin our chances on this particular bird for several days.

However, we were too close to the river to hear him respond or for him to hear our call. There was also a small stream we had to cross. Consequently we had to stalk our way uphill, away from both the gurgling brook and the river. We crossed the stream, made our way silently uphill as far as we dared, then stopped behind some blown down trees. After a pause we gave a call. There was no response, but we stayed for 20 minutes, watching intently, fearing that the bird was close and might come in without gobbling.

But there was nothing. Leroy and I silently crept further uphill, this time another hundred yards, but we were again reluctant to go farther, fearing we'd walk into the bird. We were far enough away from the little brook and the river that we could hear a gobbler if he answered our hen yelps.

Behind an uprooted tree, Leroy was in an excellent position from which to call. I was 30 yards ahead of him, scrunched down behind a patch of brush, my outline broken as I wedged my back against a tree.

Leroy waited a short time before making the first call. When he did, I thought I heard an answer, but couldn't be sure. It sounded like the gobble came from across the river. I was thinking what rotten luck it was that the bird was on this side of the river for a week and then, when I came to hunt, he had crossed over. But a couple of gobbles later I became convinced that the old tom wasn't across the river, but merely down right next to it—and he sounded like he was on his way!

It was obvious he was a tom with love in his heart. He was gobbling up a storm. Closer and closer he came. The hunt was only a few minutes old and it was already building to crescendo proportions.



We were in a wooded section that was unusually open. The gobbler was between 150 and 200 yards away when he first came into view. Many times turkeys answering the call are right on top of you before they're spotted. What a thrill it was to see him, even at that distance, strutting that gobbler walk of his as he waddled from side to side, fanning out his wings, puffing up his tail feathers. I swear he gobbled every other step. He was so amorous I said to myself, "Susquehanna Tom, you're as good as in the oven!"

Now a turkey caller like me, who continually fears he is going to strike a sour note when calling, would have shut up and not said another word until the shotgun barked. But not Leroy. I told you he is a caller par excellence. He kept sending out those seductive hen yelps, lower in volume each time. It kept the gobbler's attention off me and concentrated on Leroy's calling spot. Every time Leroy yelped, the tom not only gobbled, he gobbled ten times before Leroy had a chance to make sure his throat was clear enough to chance another yelp!

Angling In

The bird wasn't coming on a straight line toward Leroy. Rather, he was "angling" in. The more he angled, the closer he was approaching the spot where I was sitting, completely motionless. He passed in and out of sight in the trees. Even though he was obviously amorous, he was also wary. Every few steps he would stretch his neck high, pause for a second, and peer intently all around, looking for anything out of place in this woodsy domain that he knew so well. First he was behind this rock, then that tree, then another patch of brush, but always he was coming closer and closer.

Keep in mind that this bird was first spotted from over 150 yards away. The old heart started pounding and the adrenalin started pumping even before that. With each step the turkey took, I could hear my heart



THE GOBBLER was angling in. First he was behind this rock, then that tree, then another patch of brush, but always he was coming closer and closer.

beating louder and feel the excitement build. The bird narrowed the gap to 100 yards, 75, 50.

I was determined to have him walk right in on me, have him spot me, then flush. I'd drop him as he took wing. My shotgun was at port arms. My finger was on the Remington's safety. I was ready.

The gap was reduced to 40 yards. Then he went behind a big rock. When he emerged he was just beyond 30 yards, and he was coming straight on, right at me. Next he went behind a tree, then the brush in front of me began to intervene. He was only 25 yards away, then 20, and though I could have thrown the gun up and shot, I feared that the intervening brush would absorb too many pellets. I'd wait until he stepped around the patch of brush in front of me. Then the Susquehanna gobbler would be mine.

He was not only close now, he was unbelievably close. My hands and face were showing, and I wondered why he didn't see me. He was almost ready to step from behind the brush

when he stopped, peered intently in the direction of the call. He saw nothing out of place, so kept coming. He rounded the patch of brush in front of me and paused to stretch his neck for another look-see. I started my smoothbore to the shoulder, pushing off the safety, anticipating his flush.

Blasted Bird!

But the blasted bird didn't flush! He simply turned and sped off on the run on his back trail, around the brush that was between us. That's when I panicked. I leaped to my feet, and when I tried doing that, the river gobbler did take off. For a brief fraction of a second I knew he was mine again—an easy shot. But just as the shotgun found its familiar niche between my shoulder and cheek, my feet went out from under me. I was falling backward. The gun went off. More panicked than ever now, I leaped to my feet again, leveled on the bird, but I lost my footing again just as the 1100 reverberated the second time. The pellets tore through foliage above the bird. He was gettting away. Now he was behind two trees. When he emerged he was a long ways off. My final load was absorbed by the trees. I watched helplessly with an empty gun as with powerful wingbeats he climbed over the tree tops and disappeared. The master of the river bottom had matched wits with me and won.

I couldn't believe it. I couldn't believe he had been so close and escaped. I couldn't believe so many "ifs" had gone wrong. I was overwhelmed with dejection and frustration.

I paced off the distance to the spot where he had been when he rounded the brush. Nine steps! About 25 feet! Why didn't he flush? Why didn't I yell to make him flush? Paradoxically, the evening before my departure for turkey country I had shot 25 straight at skeet, but that claybird game had not provided me any practice in shooting a shotgun while I was in the process of falling on my can.

I hadn't been doing any calling. Leroy had done it all. Therefore, during the many moments when the bird passed behind rocks, trees, and brush, I had ample opportunity to throw off the safety, put the gun to my shoulder and cheek. Had I done so, when the bird stepped around the brush at nine paces and stretched his neck for that last look-see, I could have merely pressed the trigger. At that distance—well, you don't need much imagination. But I was so confident he would be mine that putting the gun up prematurely had never entered my mind. Believe me, in the future I'll be ready.

Leroy Good is convinced I suffered a case of turkey fever, but that is not only incorrect, it doesn't give the bird credit for his uncanny ability to stay alive, even under the most adverse circumstances. It wasn't turkey fever. It was the bird doing the unexpected, combined with me falling on my fanny at the critical time that gave him his freedom.

Now this gobbler of the Susquehanna has taken his place in my memory alongside a mammoth jack crevalle I lost off the coast of Angola after a 55-minute fight (a sure world record on light 15-pound test line), a huge Atlantic salmon I encountered and lost in Labrador, a spectacular ibex I missed in the mountains of Iran (even though I took a very fine but lesser head the next day), and a big buck that gave me the slip similarly a few years back.

The fact is, if we all bagged our game every time we went hunting, it not only wouldn't be much of a challenge, there wouldn't be much game, either. The sporting days I remember most—the ones when the Red Gods smiled—are the times when the quarry has outwitted, outsmarted, and outdone me. Had I bagged the Susquehanna gobbler, it would have been just another enjoyable hunting experience. The circumstances that surround *not* getting the bird will live in my memory forever.

Of Prey and Predators

By Chuck Fergus
PGC Information Writer



Photo by Leonard Lee Rue, III

EXTREMELY WARY, COYOTES are extending their range from Canada into New York. Coyotes and coyote-dog crossbreeds are sometimes seen in Pennsylvania.

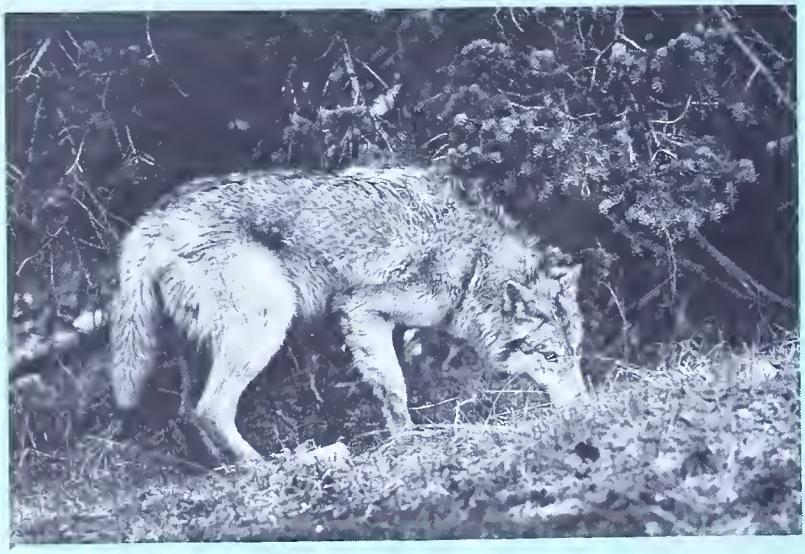
WE WERE HIGH and wild in Wyoming's Absaroka Wilderness. The first night on the trail we camped on Crandall Creek, a cold, swift stream filled with cutthroat trout. It had been a typical early autumn day, with a high blue sky that fairly glowed above the rugged mountains.

We'd pitched our tent in a clearing among arrow-straight lodgepole pines, fluffed up the down bags and laid them on foam pads in the tent. We built our fire on the creek's pebbly floodplain. After finishing a trout supper, we leaned against some driftwood and stared into the popping campfire. The sun had set and it was getting cold.

From the mesa behind us rose a weird bubbling cry that competed with the rush of the creek and won. Another voice answered across the stream, and more howls rolled from distant Hunters Mountain. For ten minutes the coyotes kept up their song, a series of yips and barks followed by drawn-out wails. I edged closer to the fire. I know coyotes don't attack people, but their chorus sent chills racing down my spine, maybe a throwback to an age when man was prey and quailed at the bear's growl and the big cat's scream. (We found fresh tracks around camp most mornings but never saw a single coyote. Extremely wary, coyotes are extending their range from Canada







THE red-tailed hawk and gray fox are often seen in Pennsylvania, but the timber wolf and mountain lion have vanished from the Keystone State.



into New York, which now has a breeding population. Coyotes and coyote-dog crossbreeds are occasionally seen in Pennsylvania.)

Obviously, man was keenly interested in predation when he was prey. Later he asserted his own dominance through hunting and began to look on predators as direct competitors for the weaker, plant-eating game. As his hunting skills grew, man sought to reduce—sometimes even to exterminate—the predators. But always the coyotes, wolves, foxes, cats and raccoons, the eagles, hawks and owls, have captured his imagination.

Before we examine predators we must define them. Webster's Unabridged Dictionary lists a predator as "one that preys, destroys or devours"; "an animal that depends on predation for its food." Predation is defined as "a mode of life in which food is primarily obtained by killing and consuming animals." Others put it more bluntly: a predator is any wild creature that kills an animal a man wants to kill.

Animals exhibit varying degrees of predation. Although not generally thought of as a predator, a robin gets nourishment by preying on insects and earthworms. Foxes, on the other hand, aren't exclusively predators—both grays and reds eat grasses, berries and fruits in summer, because raspberries and grapes are often a lot easier to "catch" than rabbits and grouse.

Top End of Food Chain

Predators are at the end of the food chain and represent the highest strand in life's web. In Wyoming, where we heard the coyotes howling that night, the food chain may be short and abrupt: a deer, which eats vegetable matter but doesn't prey on anything, is killed by a mountain lion (or more likely a hunter). In the East, where large predators other than man are rare or absent, food chains may be long. A cricket falls prey to a tiger beetle; a shrew eats the beetle; a screech owl swoops down on the shrew one night; and possibly a fox, at the end of the chain, finishes off the owl.

The lower a species' position on predation's scale—the more it is preyed upon by other animals—then the more abundant are its numbers. For instance, in a balanced ecosystem there are many more crickets than shrews, more shrews than the longer-lived foxes. To ensure survival of the species, the high reproductive rates of prey animals automatically produce surplus individuals each breeding season.

A Man Said to the Universe—

Stephen Crane wrote, "A man said to the universe: 'Sir, I exist!' 'However,' replied the universe, 'the fact has not created in me a sense of obligation.'" Nature is just as indifferent to the fate of scores of individual rabbits or pheasants—or foxes. Nature—without man's interference—simply gives an entire species the opportunity to survive or perish. Surplus individuals often die because suitable food and cover are available to only a few animals. Disease, fires, floods, hunters, accidents and predators all whittle down the annual surplus.

The following may not be how the average ruffed grouse brood fares in Pennsylvania, but it illustrates reduction of a surplus. Suppose a hen and a cock mate. Soon after, the male dies when he strikes a tree branch while flying. The hen hatches seven chicks. Two are unable to find shelter and drown in a sudden thunderstorm, and another dies of a parasite infestation. As the chicks mature, one is hit by a car. The hen grouse is shot by a hunter in October. In winter, one of the surviving birds wanders from its home range in search of food. It roosts in a hardwood, which doesn't offer as much cover as a conifer, and an owl grabs it. Come spring, two birds are left. They replace the parents in the local grouse population. The cycle continues; seven grouse have died in nine months and nature didn't even bat an eye.

While predation caused only one of the seven grouse deaths in this example, skunks, raccoons or foxes could have eaten three or four of the birds after they died. Grouse remains found in stomach or dropping samples of these predators could cause people to wrongly conclude that predators had killed most of the grouse.

Most predators are opportunists and eat what's easiest to catch or find, including carrion. Predators sometimes kill surplus animals, game or non-game, because these newcomers are easy marks. Escape cover, individual territories, burrows, dens and food supplies are all limited; while seeking these essentials, the surplus of a population expose themselves to predation. When the surplus is gone, one of nature's built-in safeguards prevails—predators don't single out and hunt down survivors but turn to food that's easier to obtain.

Predators usually kill the crippled, old or sick, which are easier to catch than healthy critters. A fox, for example, usually makes only one try for a rabbit. If the rabbit is alert, healthy, physically sound and near good cover, it will probably bounce off to safety. If not, the fox has a meal. By helping weed out the unfit, predators contribute to the vigor of wild bird and mammal populations.

No Hard Stand

By now, a few readers may be ready to thumb to the next article because they realize that "Of Prey and Predators" isn't taking a hard stance against predation. This newfangled idea runs contrary to much of what they've heard and read, so they can't be blamed for feeling this way.

Up to the 1940s, game conservation departments across the nation urged killing as many predators as possible in the mistaken belief that this would automatically bolster game populations. Maybe this viewpoint carried over from frontier days when people and predators competed directly for food. Before they'd done any definitive research on predation, conservation departments simply went along with general public opinion that predators were "bad" and should be eliminated. They paid bounties on bobcats, weasels, foxes, hawks, owls and many others—without increasing the amount of game available to the hunter. Studies have since shown that habitat—food and cover—plays a far greater role in prey population size than does predation.

At one time, thousands of birds of prey were shot each fall as they drifted south along Blue Mountain, near Kempton in southeastern Pennsylvania. The ospreys, hawks and eagles use thermals that rise along the ridge to gain altitude while migrating. One place, Hawk Mountain, is famous as an observation area for such migrations. Conservationists bought this tract in 1934 and closed it to gunning. Today at the Hawk Mountain Sanctuary, naturalists and sightseers observe and appreciate birds that once were inviting targets.

Obviously, we've come a long way since that era of predator persecution.

We've discovered the unique, important role predation plays in nature and realize that in many cases predators control pest populations. Research has shown that while predators *do* kill game, they neither drastically deplete game populations nor rob the hunter. Finally, we've even begun to appreciate predators aesthetically, beyond an arbitrary dollars-and-cents value.

Although many gaps remain to be filled, scientific knowledge about predation is increasing. A special issue of GAME NEWS in 1952, entitled "The Predator Question," examined the ecology of predation, the economics of predator control, predator food habits and suggested re-evaluating our state's bounty program. The Game Commission discontinued bounties in 1966. Because they're wary and secretive by nature, predators are often hard to study. But as sound biological evidence continued to trickle in, we recognized that

predation does not normally threaten game populations.

Recently, biologists released four Minnesota timber wolves on Michigan's Upper Peninsula. Although all four wolves died (three were shot and one was hit by a car), biologists gained important data from the experiment: transplanted wolves apparently maintain pack identity, establish new territories, and find enough food to live. The U.S. Department of the Interior lists the Eastern timber wolf as an endangered species, so perhaps this recent information holds the key to its survival.

It's all right to re-introduce wolves into wild places where they once roamed, but transplanting these predators to more-settled areas wouldn't be wise. Human-wolf conflicts would be inevitable; while people will grudgingly concede a few deer to the wolves, sheep and cattle are strictly hands off. It can't really be any other way. City-bound folks may philosophize about the beauty of wolves, cougars and grizzlies, but sometimes they cause real financial hardships for Western livestock raisers. The best way to ensure survival of these predators is to preserve the wild lands they require.

Most Pennsylvania predators find enough food in the wild, but on rare occasions they raid sheep, hogs or domesticated fowl. When this happens, localized predator control is necessary through trapping and hunting. Often a single bold animal is responsible for local losses, and when it is removed, things get back to normal.

A number of predators live in Penn's Woods, including red and gray foxes, raccoons, bobcats, minks, weasels, hawks, owls, herons and many other species that exhibit predation to some degree. The game law classifies foxes as predators and in the future may place seasons or bag limits on both reds and grays. The raccoon is a game animal with a regulated hunting and trapping season. At present, seasons are closed on the bobcat; it's illegal to hunt or trap this animal. Mink are furbearers and may be taken in season, and hawks, owls and herons enjoy complete protection under both federal and state laws.

A list of seasons and bag limits covering our state's game birds and animals is found in the "Digest of Pennsylvania Hunting and Trapping Regulations," issued with each hunting license or available free from the PGC's Information and Education Division, P.O. Box 1567, Harrisburg, Pa. 17120. Refer any questions not answered by this handbook to a local game protector.

Man the Hunter

Man, a hunter and predator by nature, identifies more with predator than with prey. We admire the fox's intelligence, the bobcat's wariness, the great horned owl's fierce courage and the wolf's strength. Compared to their prey, predators are rare, so seeing one in the wild is often a thrill.

In recent years, many have tried to justify predators economically, pointing out that they kill rats and mice and save farmers many millions of dollars. But more and more we've sensed a crassness in having to justify a natural mode of existence by how much coin it puts in our pockets. We've finally begun to appreciate predators for their sakes alone.

Many perils threaten predators today, from decreasing habitat to accumulating pesticides to dwindling wild land. Some predatory species are decreasing in numbers, while others seem able to cope with environmental problems. Predators are facing crucial times, and we hope they weather them. We must try to learn more about predation and accept it as the natural part of life which it is.

Biologically, predation isn't cruel or bad or dishonest or sly. It isn't kind or good or honest or ingenuous, either. It's simply one of nature's ways and that, finally, is where the wonder lies.

Love Affair With A Carbine

By Loring D. Wilson



I WILL NEVER forget the day I walked into the P & G Gun Shop for the first time. I was eighteen years old and in my pocket I had one hundred and fifty dollars that I had saved over the summers. I was out to buy my first big game rifle, and the advice that I had received from all my friends and my father's friends had just about settled my mind on a bolt action in a nice, flat-shooting rimless caliber.

The dealer was the kind all gun dealers should be. He allowed me to handle all the rifles in stock as he explained the characteristics of each caliber. He showed me ballistic tables and drop tables, and he went into a detailed discussion of the relative merits of each action and each brand. I finally decided on a Winchester 270, and was about to hand over the money when I noticed an old rifle leaning in the corner behind the counter.

"What's that?" I asked.

"Oh, that's just an old thutty-thutty. You wouldn't be interesed in that."

"Could I look at it?"

Fourth-Hand 94

The gun he handed me was a battered, fourth-hand Winchester Model 94. The bluing was practically gone from the barrel and action, but there was no rust that I could see. The finish on the stock was chipped, and a long crack ran from the tang about six inches into the buttstock. All in all the gun looked as though it had been buried for about 50 years, but its lines brought back all the old Wild West movies I'd ever seen, and images of Zane Grey heroes danced in my head like the proverbial sugar plums on Christmas Eve. It was love at first sight.

I worked the lever a few times. It was slick as a greased pig and still tight. I very intelligently looked down the bore with the action open, as I had read in the hunting magazines, and I couldn't see anything. The gunsmith smiled and stuck a piece of white paper into the action, turning me so that the light fell on the paper. The bore was clean and

I HAD FINALLY decided on a 270 when I noticed an old rifle leaning in a corner. "Whats that?" I asked. "Just an old thutty-thutty," the dealer said. "Could I look at it?" "Sure." That was the beginning of a love affair . . .

there were no pits. As far as I could tell the rifling was still good.

"How much?" I tried to sound casual.

I must have looked as goofy as most young men suffering from their first loves, because the gunsmith burst out laughing. "Well, the gun works fine, although the outside isn't too good. 'Course it can't compare to that 270, but if you want it, you can have it for fifty bucks. I'll even reblue it for you for an extra ten, and I usually charge twenty-five."

How could I turn down a deal like that? I paid him and took the gun home because I wanted my friends to see what a shrewd deal I had made, and I wanted them to have the before and after appearance of the gun to further reinforce what a great gun buyer I was. My father was the first to see my treasure.

"What is that?"

"My new rifle. Isn't she a beauty?" Of course it was a she. Those lines and the curve of that lever couldn't belong to any other gender.

"All the blueing's gone."

"The man's going to reblue it for me."

"And the stock's cracked!"

"Yeah. I guess I'll have to do something about that." I was beginning to feel pretty low. I decided that my friends could wait until I was all finished to see it. I had purchased a stock finishing kit before I left the store, and so I thought the best thing to do would be to get to work on the stock immediately. I removed it from the rifle, and took the barreled action back to be blued. That evening I started work.

First of all I scraped the stock down completely with a piece of glass. Then I spent two evenings with progressively finer grades of sandpaper and steel wool, until there was not a rough place to be found anywhere on the wood. I took a small wedge and forced the stock apart, coated the inner surfaces thoroughly with a good waterproof glue, and then taped the wrist of the stock tightly. Two days later I re-sanded the wrist (this only shows the impracticality of youth; I knew I should have glued it first, but I was in too much of a hurry to get that old finish off) and applied the first coat of stain. The wood was actual walnut, not the stained hardwoods that so many makers are using today, and the soft, rich brown that was the result greatly increased my faith in my original decision.

Give Game News
to a friend

Smuggled In

About the time it was finished the gun shop called and informed me that the bluing was completed, so I high-tailed it over and picked up the barreled action. I smuggled it into the house and hid it in my closet so that no one would see it until the gun was complete. I then put a good oil finish on the stock, and as soon as it was dry I reassembled the gun. For fully half an hour I sat just looking at it. It was beautiful. Even my father had to admit it was beautiful. But he would not admit it was a good buy.

"You need more power than that, son. The cartridge is obsolete."

My friends, the flat-shooting magnum freaks, were no more encouraging. In fact, some were downright derogatory. But I had faith in my new found partnership, and I was bound and determined to show them.

It took over a year, but 50 boxes of ammunition later (I started reloading after the first five) I was able to snap the gun to my shoulder and hit orange juice cans at 50 yards. At 25 yards I could flip a coffee can into the air with the first shot and, working the lever at my shoulder, paste the can again before it hit the ground. One shooting session with my bolt

action friends and they began to get a little more respect for the little carbine.

Still, the power boys put her down, and it took me two full years to show them up. But my accuracy practice and the deer population of Savage Mountain, Pennsylvania, got me an 8-point buck when I was 20, dropped with one shot at 65 paces. After that, there were no more put-downs.

Since that day 10 years ago, several guns have been added to my cabinet, and I have hunted many varieties of game in many areas. But whenever the game gets to be of large size, and the range will be that at which I can shoot accurately with open sights, it's always that "old thutty-thutty" that comes with me. It has been a love affair that has never ended. My favorite hunting grounds are on Savage Mountain, and I have never once felt "undergunned." And only once have I needed two shots to bring down a deer, but that was my fault and not the gun's. On my fifth deer, I got buck fever. The first shot only grazed his back but it knocked the shakes out of me, and I hit the buck the same way I used to hit the coffee cans—in mid-air—for an instant kill.

Growing up with a rifle, a man comes to love it and use it as an extension of himself. Such was the case with the little carbine. For eastern hunting the 30-30 has all the power necessary, and the balance and the lines always recall to me the days when the sisters of that very same gun went west to win the frontiers. I can't ever picture myself in deer territory with another gun. As far as I'm concerned, the little carbine is a love of a lifetime.

Books in Brief . . .

(Order from publisher, not from Game Commission)

All the Answers to All Your Questions About Training Pointing Dogs, by Paul Long, Capital Bird Dog Enterprises, 10 N. Helderberg Parkway, Slingerlands, N.Y. 12159, 85 pp., paperbound, $4.35 delivered. The title describes the contents perfectly, so little more need be said. Paul Long has spent 45 years—which is most of his life—training pointing dogs, and here he tells how it's done.

Hunter's Field Guide to the Game Birds and Animals of North America, by Robert Elman, Alfred A. Knopf, 201 E. 50th St., New York City 10022, 655 pp., $12.50. Extensive yet concise coverage of this continent's game—upland birds, ducks and geese, swans, shore and marsh birds, small game and big game. Physical descriptions of all, plus distribution, behavior, and comments on hunting habitat are covered. Hundreds of photos and some illustrations by Ned Smith.

The Duck Hunter's Handbook, by Bob Hinman, Winchester Press, 253 pp., $8.95. As might be expected in a handbook, this covers duck identification, equipment, guns and loads for duck hunters, observations on weather, blinds, boats, decoys, dogs—most everything of concern to a wildfowler. But Hinman's 40-plus years of experience have added a number of practical first-hand insights that make this more than "just a handbook."

The Part I Remember, by Charles F. Waterman, Winchester Press, 199 pp., $8.95. This is not a handbook, not a how-to-do-it manual. It's a collection of almost half a hundred stories or vignettes lovingly selected from memories created by countless sojourns to the mountains, woods and streams of Mexico, the United States and Canada. Choose among such as "The Hunter's Ghost," "The Worm and I," "Old Ridgepoles," and "How to Give Away a Fish." It doesn't matter which you pick, you can't go wrong.

After Half a Century, Things are Still Going Strong At . . .

Philadelphia and Harrisburg Sharpshooters

By Wes Bower
CIA, Southcentral Division

"FIFTY YEARS is a long time," said Percy White, president of Philadelphia and Harrisburg Sharpshooters, Inc., "and we've seen a lot of changes around our hunting camp."

This landmark hunting camp, located near Center Union in Henderson Township, Huntingdon County, has withstood the rigors of half a century. It's been in existence since 1925. In that year, ten avid hunters, five from the Philadelphia area and five from the Harrisburg area, joined together and purchased approximately 450 acres to serve as a hunting camp.

"Not one of the original members is left," commented Percy. "I'm the oldest with 47 years' association with the camp." At present only eight active members are left. The camp accepts associate members and presently the combined membership is 17.

Tradition and nostalgia play an important part in this group's hunting activities. Photos of old members decorate the camp walls. Tradition also dictates that every morning before the hunt begins all members line up outside, where their rifles are checked for safety by the camp captain, Percy White. They are then reminded to hunt safely and like gentlemen. Only then does the hunt begin. That formality was begun in 1925 by the first camp captain. It has been carried out by all of the succeeding captains throughout the last 50 years.

Cagial Erwin, an old-time member who has hunted in many states and several countries, commented, "When we're hunting we take it seriously and safety always is stressed. In the evening when the guns are racked, we have a lot of good clean fun. I've hunted different game in many places, but the hunt at our Pennsylvania deer camp is by far my favorite time."



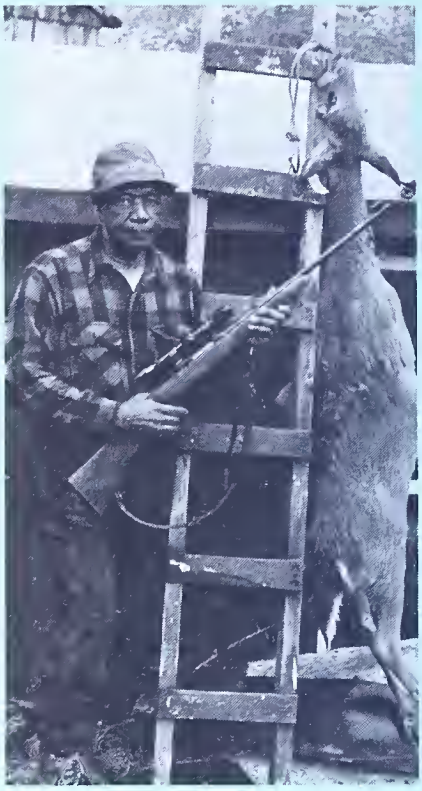
PERCY WHITE, camp captain of PHSI, uses walkie-talkie to check that watchers are in position before taking out the drivers during last season's hunt.

Philadelphia and Harrisburg Sharpshooters, Inc., enjoys the respect and friendship of adjacent landowners. Deer hunting neighbors often drop in, have a cup of coffee, warm up a bit, and see what luck the camp is having.

John Wike, a local sportsman who has a farm adjacent to the Sharpshooters' acreage, keeps an eye on



FRANK BOUIE, Percy White, Cagial Erwin and Norman Gant, all of the Philadelphia area, have been members of the Huntingdon County camp for many years.



GEORGE M. THOMAS, Philadelphia, with doe taken in 1974 antlerless season.







CHARLES S. JONES, Philadelphia, on deer stand near 50-year-old camp, left. Above, Frank Sanders cooks for the 17 hunters in camp.

their camp during the off-season. John can remember when the road going into the camp was so bad that camp members, after several unsuccessful attempts to "make the hill," would park their vehicles and carry their supplies the rest of the distance. "It never bothered them, but was considered part of the hunt," commented John.

The Sharpshooters often reminisce about the "good old days"; nevertheless, they are fully aware of and enthusiastic about present day opportunities. Frank Bouie recalls when a turkey track was a talked of event. Now several flocks of turkeys are found in the immediate area of the camp.

Further, all agree that while maintaining the camp and paying taxes on the land can be a costly proposition, today's increased seasons and bag limits allow Sharpshooters more recreational time at their camp than ever before.

Member George Thomas commented, "With the early small game season for squirrels, the regular small game season with all the turkeys we have, the deer season, and now the longer after-Christmas season, we have a lot more time to hunt. Also, the three-week spring gobbler season with some trout fishing thrown in makes an ideal vacation." At their last annual meeting the camp members agreed to diversify their hunting to include more game species and utilize the camp more.

After talking to the members of Philadelphia and Harrisburg Sharpshooters, it became apparent to me that "bringing home a deer" was a secondary factor with these hunters. More important was the camaraderie established at the camp. This feeling lasts throughout the year as they travel to their separate homes in the Philadelphia and Harrisburg areas to wait for the next hunting season to roll around.

As camp president Percy White stood in the spacious kitchen drinking coffee and staring out the window toward Roundtop Ridge, his statement was a reflection of all the camp members:

"I've put a lot of time, work and money in this club," said Percy, "but it's been worth every cent. My experiences here and the comradeship I've enjoyed can't be evaluated in dollars and cents. One of my most fervent desires is that the Philadelphia and Harrisburg Sharpshooters stays together for at least another fifty years."

After spending some time with these sportsmen, and observing their respect for the sport of hunting and the fellowship they enjoy from camp life, this writer is betting that they will.

Archers Report Taking 3909 Deer

Pennsylvania's archers had another good year during the hunting seasons recently concluded, according to reports filed with the Game Commission. During the 1974-75 seasons, archers reported taking a record 3909 whitetails in the state, compared to 3652 the previous year. Bowmen reported taking 1572 antlered deer, including 969 with three or more points. Archers took 1898 females and 439 males in the antlerless harvest. Overall, 2011 males and 1898 females were tagged.

Real Chow Hound

The tiny bat has a big appetite. It will eat a quarter of its weight at one meal and more than half its weight every night.

Gus, the Flittermouse

(Myotis lucifugus)

By Carsten Ahrens

THE CAVE on Chick Straughman's farm was like a long, low porch that triangled back into the hill. In front, a shallow stream sang its way over a flat rock bed, then made a pretty waterfall as it fell several yards to a parallel ledge and ran on to the river.

The cave was used winter and summer by the Straughman cows, horses, a few goats and pigs, and Chick's cat, Satan, who was constantly trying to catch either of a pair of woodrats. Warm in winter, cool in summer, the porch was a comfortable place to escape a summer shower or a winter storm. At the apex of the underground triangle, a corridor wandered back into the dark. Chick had installed a gate at this point to keep the livestock from getting lost. The barrier was locked for Chick didn't like spelunkers. Winged cave explorers, the flittermice, he tolerated; they didn't get lost, break legs, scare the animals, and leave beer cans lying about.

Gus and Luci

Two of the flittermice Chick allowed but about whom he knew nothing were tiny Gus and Luci. Born that May morning, the little brown bats were curious bits of protoplasm. He and his sister were most underdeveloped except for their mouths and feet; these organs were most important for their very survival. Following birth, the bat babies clung with feet and snout to the brown fur of their mother. That day, as their dam hung by her feet to the cave ceiling, the two little ones clung like burs, one at each of the two mammary glands, their heads pointed to the cave floor. Their hands and forearms were of little use at this time for they were developing into leathery wings. Bats have a double fold of skin stretching in an arc from one long finger to the next on one hand, and then on to the hind foot; the membrane continues from ankle to ankle, enclosing the short tail, and then on to the fingers of the other hand. This still leaves much of the chest, neck and head apart from the wings that give bats their unusual maneuverability in the air. Bats are the only mammals with true flight. Fossils tell us these mammals have been around some 60 million years; birds, 120 million years. Yet, for newcomers, bats get along in the air marvelously well.

At Home in the Cave

There were about one hundred little brown bats in the dry corridor that led in from the porch of the Straughman cave. From the extent of the guano on the floor, the number of individuals must have been considerably greater in times past. Each summer day the members of the colony hung themselves, rather closely grouped, from the ceiling. A flashlight showed them a quite glossy patch up there, for their dorsal sheen is a characteristic of this species. Bats, unlike birds, make no attempt at nest building but will move into any suitable shelter, natural or man-made, where they are undisturbed.

For two days, the bat babies, Luci and Gus, were blind—no great disability, for like their closest terrestrial relatives, the shrews, their tiny, beady eyes, lost in thick fur, are little used in the struggle for existence. Shrews depend on a keen sense of smell to find food; bats rely on their voice

and ears and a sonar system. Sounds bats originate and the echoes that ensue make flight, food-getting, their very existence possible in that often total darkness of their cave and night world.

For three nights after the day they were born, the two little bats accompanied their mother on her flights. Gnats, midges, and mosquitoes were swarming in the marshes along the stream. A little brown bat will capture and devour a thousand mosquitoes in a single night's activity. Their larger cousins, the big brown bats, hunt down large hard-shelled beetles which their mouthful of 32 teeth grind into food. One ponders why Gus and his little brown bat relatives were given 38 teeth when only fragile dipterous insects seem to predominate in their diets.

Death of Luci

An adult little brown bat weighs but one-third of an ounce, so the carrying of the young in flight by the mother is usually of short duration. The mother made it clear, at least to Gus, that before she started out on this night's flight she would leave the little ones behind. She found the carrying of the babies this summer a special ordeal. Gus's little body adjusted and cooperated with every sudden movement in his parent's erratic flight while his tiny partner hung like a dead weight.

At twilight, with his mother's help, Gus hooked his clawed toes—so much better developed than any other part of him—to a bit of the irregular ceiling of the cave. A bat's toes and claws are so curved that once the animal hangs from his support, no relaxation of foot muscles will release his hold; his wings come to his assistance in unhooking himself.

But it was different with Luci. She didn't respond to the assistance her mother offered, and suddenly, rather leaflike, she fell to the cave's floor. Satan, the cat, must have anticipated the situation for he was there. He carried the little creature to the

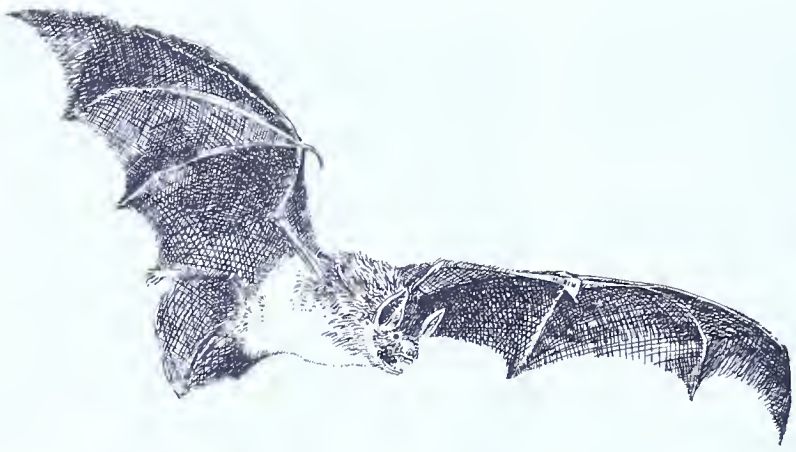


MRS. STRAUGHMAN had no use for bats. She wore her sunbonnet during the day to keep from freckling and in the evening because she wanted "no flittermice in my hair."

porch of the cave by the waterfall. But Luci offered no opposition—no sport—so Satan dropped the fragile body and it slid down the embankment into the water and the stream carried it into the night.

Gus slept while his mother explored the countryside for insects. One of her favorite haunts was a curved corridor through the Straughman farmyard. It began at the pasture, ended at the highway, and was lined with silo, barn, outbuildings, fruit trees, the farm house, springhouse, and two rows of tall, thin poplars. There seemed always a breeze that carried insects along this path. She avoided the glaring security light which lured larger and heavier insects such as the big-bodied beetles and moths; two big brown bats considered this their hunting area anyway.

Mrs. Straughman did not appreci-



ate the insect-controlling activity of the colony in the cave; she had no use for bats. She wore her sunbonnet during the day to prevent freckling, and she continued to wear it, her thick braids well hidden, if she went out-of-doors at twilight or later for she wanted "no flittermice in my hair." Her husband would ask, "Did you ever actually know anybody who got a flittermouse tangled in her hair?"

"No, but they say . . ."

"Rubbish!" Chick would answer, and his wife went right on wearing her sunbonnet if she made an evening visit to springhouse or garden.

Bats as Weather Prophets

The colony always left the cave along about Indian summer to go south, returning on no particular date in late spring. In autumn afterglows, when Chick went after the cows to bring them up to the barn, the bats would be streaming out of the inner opening, fanning out as the porch permitted, and the farmer would wonder if they would straggle in as usual the next morning. The bats never returned to the cave in the morning in the dense flock in which it had departed on the evening before. And, of course, a morning came each fall when it didn't return. Then Chick mentioned at the crossroads store that cold weather was at hand. No one in the neighborhood worried about winter until the farmer announced the bats had gone south. When Chick reported their return, it was high time for those who made gardens to get in the butterbeans, the acorn and summer squash, and sow another planting of lettuce.

Gus's parents had mated after the tradition of little brown bats in the fall but fertilization didn't occur until months later. The sperms were held in abeyance in the reproductive system until the eggs had formed and matured. This was in February. The gestation period was approximately two months in length, so the birth of the young came in May. The uncertainties of weather can upset such a timetable and often does.

So Gus spent long days in the gloom of the cave, eating, sleeping and growing. His forearms and hands, with the exception of his thumbs, and his tail and hind limbs, with the exception of his feet, were encased with membrane and became first-class wings and sort of a rudder. His ears developed and became long enough to reach the end of his snout. He tried out his high-pitched voice. Each morning he welcomed his mother's return. The night had been long and he was always hungry.

Then early in June he learned to fly, to tune in the echoes from his own squeaking, to know where objects were in his path and avoid striking them even in rapid flight in absolute

darkness. And, oh, the joy of overtaking and devouring the winged denizens of a summer night! Small wonder, to one watching in the twilight, Gus seemed like something intoxicated as he whirled, zig-zagged, sped off like an arrow, dropped like a plummet, skimmed one moment just above the surface of the stream, and the next, disappeared into the darkling sky. Now and then he would swoop to a branch where the foliage was dense to hang himself by his feet for a short rest; then off he would race again.

So Gus, the flittermouse, began a life that would have seemed strange and unearthly to Chick Straughman and his wife. Maybe you think so, too. Little brown bats are known to live as long as two decades. Twenty years when each day's activity begins at night and ends at dawn. A life in darkness where Gus never saw where he was going but where his sonar unerringly directed him. He soon traveled swiftly a most intricate course filled with obstacles in complete blackness. He never blundered and broke his neck. His echo-location mechanism never deserted him. Summer nights for the wonders of flight and food caught and devoured on the wing; summer days for rest, hanging downward in a cave; a brief courtship in fall; a long trip south to escape winter, and a return flight, traveling with spring to the north and the cave on Straughman's farm: such was life for Gus, the flittermouse.

Five-Pound Black Powder Limit Lifted

President Ford recently signed legislation which raises the limit on the purchase of commercially produced black powder from 5 to 50 pounds for muzzle-loading enthusiasts. This legislation is intended to remedy the severe problems of availability to legitimate users of black powder caused by the 5-pound limitation.

The higher limit on the purchases of black powder for sporting, recreational or cultural purposes will not alter in any way the strict criminal penalties for the misuse of explosives, including black powder and igniters. According to the National Bomb Data Center, black powder is used in an insignificant number of bombings. During the period July 1970 through June 1971, the Center recorded 2352 bombings, of which only 96 involved black powder. Even if black powder were used in more bombings, it would still be difficult to control because it can easily be made from commonly available ingredients.

Only commercially manufactured black powder propellant is suitable for muzzle-loading rifles and antique cannons. Today, some 500,000 people are involved with the increasingly popular sport of muzzle-loading, collecting and shooting antique and replica firearms. Thousands gather at numerous competitive target shooting events all over the country, the largest of which —at Friendship, Ind.—attracts over 15,000 participants and spectators each year. Additional thousands have been drawn by the challenge of hunting with muzzle-loading rifles and shotguns—so many that 39 states now permit hunting with black powder guns.



FOR OVER A CENTURY THIS BRIDGE spanned Stony Creek near Shanksville, Somerset Co. The ravages of weather finally proved too much. Now it is gone.

Pennsylvania — LAST STAND FOR THE COVERED BRIDGE

By Wilbert Nathan Savage

COVERED BRIDGES—those time-haunted structures echoing wistful sights and sounds of yesteryear—are fighting a losing battle to remain as representative originals of a bygone era. Some of the weathered spans, no longer used and almost forgotten in remote country-road settings, are slowly moldering away behind screening growths of willow and birch, alder and sycamore. Many have been torn down and removed so completely that few if any traces of the old landmarks can be found.

But despite ravages wrought by passing years and the ever-gnawing elements, more of these venerable structures now exist in Pennsylvania than in any other state.

In mid-1970, a reliable census indicated that Pennsylvania still had 311 covered bridges. Approximately 200 were in regular use; 80 or so were in the hands of private owners. Others, bypassed, ranged from fair condition to the tumbledown state of total disrepair mentioned earlier.

Then, in June 1972, came Hurricane Agnes. Floodwaters resulting from that record storm played havoc with many a Penn's Woods bridge-with-a-roof. Columbia County lost four and had twice that many damaged; Lancaster County lost at least two. In

Franklin County a 202-foot covered span—built in 1849—was swept from its piers, but was rebuilt in 1973. Elsewhere, others were destroyed or damaged. Today the number of traffic-carrying covered bridges in the state probably does not exceed 180. Compare this number with 429 in 1953; more than 600 just prior to 1940!

At this rate, simple figures tell us that the last covered bridge in Pennsylvania could be reduced to a memory-book image by the end of this century. For despite their present-day testimony to honest craftsmanship and the superb timbers of the 19th century, and to the durability resulting therefrom, almost all of the old bridges daily creak out their certification of age. A few have been provided with enough main-beam reinforcement to enable them to carry up to 10 tons—a capacity permitting passage of school buses, medium-size trucks, heavy farm equipment, etc. But for the most part covered spans are restricted to a posted maximum load ranging from two to five tons.

At one time covered bridges served a vital purpose in every county in the Commonwealth. Today, at least 21 counties have no roofed spans within their boundaries. Others, such as Westmoreland, Clearfield and Bradford, each have but one remaining covered bridge. Those privately owned uniquely serve in various ways —from shelter for sheep to storage shed for farm machinery.

Covered bridges came in many lengths, depending of course on the width of the stream to be spanned. Most were between 35 and 180 feet. A few were longer—200 to 900 feet or more. The longest covered bridge on record in the United States once spanned the Susquehanna River at Harrisburg. This bridge featured the "camelback" design and boasted a length of nearly seven-eighths of a mile!

The width of single-lane covered bridge end openings was usually reckoned to be "a hay load wide"—some 10½ to 13 feet. It is interesting to note that a great number of bridges have a posted height clearance that closely matches the width, and not infrequently duplicates it. There are, however, some wider spans —14 to 16 feet. (The author observed some of the wider bridges in Washington County, and also one near Gettysburg. I'm sure there are others, although among the one hundred or so that I've "visited" in various counties I cannot recall seeing a "timbered crossing" that exceeded 16 feet in width. Of course, these comments don't include the rare two-lane covered bridges, such as the one which once spanned the Schuylkill River at Douglassville, Pa.).

Burr Truss and Kingpost

Two types of covered bridges gained early popularity in Pennsylvania—the Burr Truss (or Arch design) and the Kingpost type. The former was invented by Theodore Burr in 1804, but for reasons apparently not recorded in history, he did not receive a patent grant on it until 1817. The first American patent for a covered bridge was issued on January 21, 1797, to Charles W Peale, of Philadelphia, the famed painter of George Washington. Peale's bridge never got beyond his skillful drawings, although a covered bridge built across the Schuylkill River in Philadelphia did incorporate some of Peale's ideas. This bridge was constructed in 1804 by a New Englander named Timothy Palmer, and was America's first "bridge with a roof, and also open spaces for the setting of windows. . . ."

The Kingpost covered bridge, which appears never to have been patented by anyone, depends on unique inverted V bracing effectively angled to fit against the top of its massive center upright (Kingpost). The wide-swinging bottom ends of the upside-down V, precisely cut to appropriate lengths, rest on the masonry on either side and are secured to end uprights which also are sup-







FAMOUS BRIDGE, above, spanned Valley Creek at Valley Forge; it was destroyed by fire. Right above, Turner Bridge, Bedford Co., spans Raystown Branch of the Juniata. Built in 1892, 80 feet long. Right, Snooks Bridge over Dunning's Creek, Bedford Co., off Rt. 56.

ported by the abutment masonry. But, sturdy as it may sound, this type of construction affords substantial strength only for the shorter spans. The Kingpost may be 12 or more inches square, or perhaps 12x14 or 14x16 in the longest spans that this design can accommodate.

Covered bridges more than 100 feet in length usually had to rely on the greater strength of the Burr arch framing method. There is a double arch of laminated or spliced wood on either side of this type bridge, with interior uprights set *between* the great twin bows, and each upright pinned or bolted to the arched timbers. In all cases the arch extends through the bridge floor and into the abutment stonework at either end. If one or more piers must be used, as is the case on the longer bridges, the arch system extends from starting abutment to the first pier, thence to the next pier if need be, and so on until the arch tips can finally be anchored in the opposite abutment. The upthrust arches steadfastly resist every pound of pressure placed on the bridge floor and offer a remarkable degree of counteracting strength.

A single arch may measure up to four inches thick and 18 inches in height, and since uprights are "sandwiched" between paired arches on either side, this could give the shaped wood bows a total maximum measurement of 8x18 on each side. Such dimensions can be found in some of today's regularly used covered spans. It is not uncommon for arches, without benefit of piers, to stretch across streams more than 125 feet wide.

In early times the covered bridge uniformly served a vital purpose; it not only connected the neighborhood itself, but also afforded a convenience-link in contacting settlements round about. The farmer, miller, doctor, wheelwright, school child, churchgoer, blacksmith, tanner, carpenter, cooper (barrelmaker), teacher, circuit rider, gunsmith, harnessmaker—these and more found the covered bridge







KINGS'S BRIDGE, Somerset Co., above, is over 125 feet long, crosses Laurel Hill Creek. White's Bridge, above left, on Whitely Creek, Greene Co., has 15-foot clearance. Left, Bell's Mill Bridge, 123 years old, is Westmoreland Co.'s only remaining covered span.

essential to improved transportation, and a great advantage over the primitive and sometimes disastrous fording of creeks and rivers.

Hemlock and oak made up the basic types of timber used in building covered bridges—the former for framing, the latter for flooring. Occasionally limited quantities of chestnut and spruce were used—and even some walnut. To the early settler, top-grade straight walnut was just another tree among abundant forests which, more often than not, were looked upon as vast hindrances to frontier farming. Stands of pine traditionally supplied wood for fashioning hand "rived" shingles used in roofing all covered bridges built before the Civil War. After that, tin roofs gradually started to appear.

The materials-and-labor cost of a covered bridge varied with the length of the span, but generally averaged out between $1000 and $6000. Any search for the lowest expenditure on record for putting up a covered bridge certainly would have to consider the McGee's Mills bridge built in Clearfield County in 1873. This short-span structure was completed for the very modest sum of $175! A good example of a bridge at the other end of the cost scale would be the 408-foot Oyster Mill bridge erected in Cumberland County in 1881 for $5,410. Fire destroyed this beautiful Conodoguinet Creek span in 1958.

Skilled builders of covered bridges seldom received more than $1.25 for a 10-hour day. In 1857, bridge carpenters could be had for 60 to 65 cents a day, plus meals. In 1832, a man and a good team of horses received $2.50 per day hauling bridge timbers, stone for abutments, grading, etc. A man and an ox team could be hired for $2 for a 10-hour day.

Covered bridges have long been subjected to a trying variety of devastating conditions and abuses. Vandals deface and burn them; floods batter them; winds buffet them, and heavy blankets of snow test their gabled roofs. Vehicles—horse-drawn and motor-driven—have mercilessly

vibrated and overloaded them. The forces of decay gnaw at them, and the summer sun bleaches and cracks the wood that shapes them. The ever-present impact of widespread neglect strikes at their structural vitals, inexorably edging them toward extinction.

The advantages of equipping a bridge with roof and sides nontheless become quite obvious when we consider that thus shielded from the elements the covered structure gained a lifespan generally estimated to be four to six times greater than a bridge fully exposed to the four-season ravages of capricious weather. But roof-and-siding protection against the onslaught of damaging weather did exact a tolerable penalty: during winter months it was necessary to "snow" the bridge floors by hand in order to afford smooth traveling for the horse-drawn sled and sleigh.

Seasoned Two Years

Timbers selected for the construction of covered bridges generally were seasoned about two years. It was not uncommon for a single main beam or "stringer" to measure 60 to 80 feet in length. In some instances, where streams to be bridged were fairly large, logs destined for bridge building could be cut along hillsides, rolled to creekbanks, and floated to desired sites during spring freshets.

The earliest covered bridges were framed with hand-hewn timbers pinned together with dowels turned from white oak and soaked in linseed oil. Some of these pins or "trunnels" (tree-nails), were two or more inches in diameter. Boring holes to unite the timbers was a laborious task, but once the tight-fitting pegs were malleted into place, they generally held the joined sections true and firm. When nails, spikes, and bolts came into general use, the result was probably an even stronger and more durable bridge.

Covered bridges are among the gratifying reminders of our American heritage. These aging relics of yesteryear are memorials to the imagination, the ingenuity, the candid simplicity and perseverance of those belonging to their horse-and-buggy heyday. They have a firm identity with the old water-powered grist mill, the country blacksmith shop, the community watering trough. They serenely link themselves to a diligent interval that featured homemade items ranging from husking peg to ox yoke; muzzle-loading rifle and spinning wheel; wooden churn and cider press; grandfather's clock and grain cradle.

To help delay the steady disappearance of covered bridges from the Keystone scene, various societies, clubs, and other organizations have successfully gone to bat in behalf of particularly esteemed bridges needing emergency maintenance, restoration, or perhaps to rescue a bypassed covered span from razing. Occasionally the citizens of a community will sally forth on their own to wage a hot protest against destruction or removal of a local covered span. The author knows of at least three instances in which this type of assertion provided a substantial reprieve for endangered roofed spans—in the counties of Westmoreland, Washington, and Somerset.

But no matter how many present-day champions may emerge to defend the stress-weary original "timbered crossings," they are irretrievably headed for a memory-book niche in history. The thrust of time upon their term of usefulness—plus that ponderous influence called advancing civilization—will surely continue to press them ever closer to the final phase of oblivion.

Big Fellows

The sage hen is the largest of the North American grouse.

How I Got My . . .

Before-School Gobbler

By James David Valentine

I GLANCED at my watch in the pale light of the early morning. It was 5:50. That meant only 40 minutes before I had to head home to catch the school bus.

Suddenly the morning silence was shattered by the sound of a turkey gobbler cutting loose somewhere off to my right. Immediately I started in that direction, walking as quickly and as quietly as I could, and listening hard for the turkey to gobble again.

About ten minutes and three gobbles later, I had positioned myself beside an overgrown log road. Breathing deeply to quiet the pounding of my heart, I slipped the homemade diaphragm caller into my mouth and let out a series of soft clucks. The turkey responded immediately with a string of lusty gobbles. So began my fifth attempt at calling in one of a hunter's most sought after trophies, a spring gobbler.

Being fortunate enough to live out in the country, I have had more than my share of luck in hunting. In my four years of tramping through the woods, I have killed three deer, two of which were bucks, and also a gobbler in one of the previous fall seasons. Add to this the various species of small game, doves, squirrels, rabbits, and grouse, along with the companionship of my dad, and you have some idea of the many hours of outdoor pleasure I've enjoyed.

I live in the area of Raystown Lake in Huntingdon County. Our house overlooks one of the lake's back bays. The wooded ridges around our house hold most of the game animals Pennsylvania has to offer, and I take advantage of hunting as often as possible.



SPRING GOBBLERS rarely come easy, but Jim Valentine had the persistence it takes, along with the know-how, as proven by his 18-lb. trophy bird.

Saturday, May 4, 1974, began my second year of serious spring gobbler hunting. I had failed to connect on a turkey the previous fall, so I planned to give the spring hunt all I had. I figured to concentrate my efforts within a mile or two of the house, since we always seem to have a good turkey population in the area.



JIM EXAMINES his gobbler's 10½-inch beard. He called the bird within 20 yards, dropped it with a single shot from his 16-gauge pump—and was only two hours late for class!

The first Saturday of the season offered no opportunity for calling, but I did find enough morel mushrooms to fill the large plastic bag I always carry for just such purposes. With two weeks left to go, I figured I still had a good chance to bag my trophy.

Monday I was up at 4:30 and in the woods by 5 o'clock. A half hour later I heard a gobbler sound off on a ridge about 400 yards directly in front of me. In ten minutes I was within calling distance of the turkey and had made my first try. The bird started working in my direction, but then my luck went sour.

I heard the yelping of a hen somewhere behind me, and after a short calling contest, she decided she didn't like what was going on. With a few flaps of her wings she made a beeline for the gobbler. So ended my second day of the season.

The rest of the week was dotted with two more failures. My first chance for a turkey was ruined when yet another hen added to my frustrations by calling a gobbler away from me. My second chance was foiled when eight deer walked between me and another nice gobbler.

The second Saturday Dad and I hunted together in an attempt to double team one of the toms. We heard four different birds but they were all too far away for calling.

Monday the gobblers were quiet, probably due to windy weather. I told myself I needed a break if I was going to score and promised myself to try even harder from here on out.

Tuesday morning of the second week of the season is the day I described in the beginning of this story. I had a deep down feeling that this this was the day I had been waiting for.

After I had made my call and heard the gobbler answer I could faintly hear the old boy moving in my direction. I slowly raised my 16-gauge shotgun and eased off the safety. Suddenly I realized what a terrible spot I had picked to call from. Although I was well hidden, the brush all around me was thick, and about 20 yards directly in front of me was a tight stand of small saplings. With all this brush I knew I would have to get the turkey to step out on the old log road in order to get a shot.

Arms Like Lead

Several minutes passed. My arms felt like lead from holding the gun, but I didn't dare move because the gobbler was now within 30 yards of me. I could hear him walking in the dry leaves just beyond the saplings. He gobbled twice and my heart was pounding so loudly I was sure he could hear it. He started moving off to my left and suddenly I saw him. He was moving toward the log road, looking in all directions.

My gun began to shake slightly in my numb arms. He turned and looked directly at me, and I thought it was all over. Then he took several more steps and I knew he hadn't seen

me. I judged the distance to be about 20 yards and made up my mind that when he stepped between two saplings out onto the road, I'd shoot.

He slowly turned and let out a gobble, his wing tips dragging on the ground. Suddenly he stepped between the two trees and looked directly at me. I had to move my gun about six inches to center the bead. As I moved he let out a loud alarm putt, but it was too late. The load of magnum 6s caught him dead center. He was down—flopping a little, but down.

I quickly chambered another shell, pushed the safety on and ran for my bird. I grabbed the turkey by the neck and let out a yell that could be heard a mile away. I couldn't believe the length of the beard and the beautiful color of the feathers as they reflected the early morning sunlight.

After my hands stopped shaking, I filled out and attached my turkey tag, unloaded my gun, and raced for home.

After receiving the excited congratulations of my mother and sisters, I weighed my gobbler. He tipped the scales at 18 pounds and his beard was a full 10½ inches long. I anxiously waited for Dad to come home. Seeing the look on his face made it even more worthwhile.

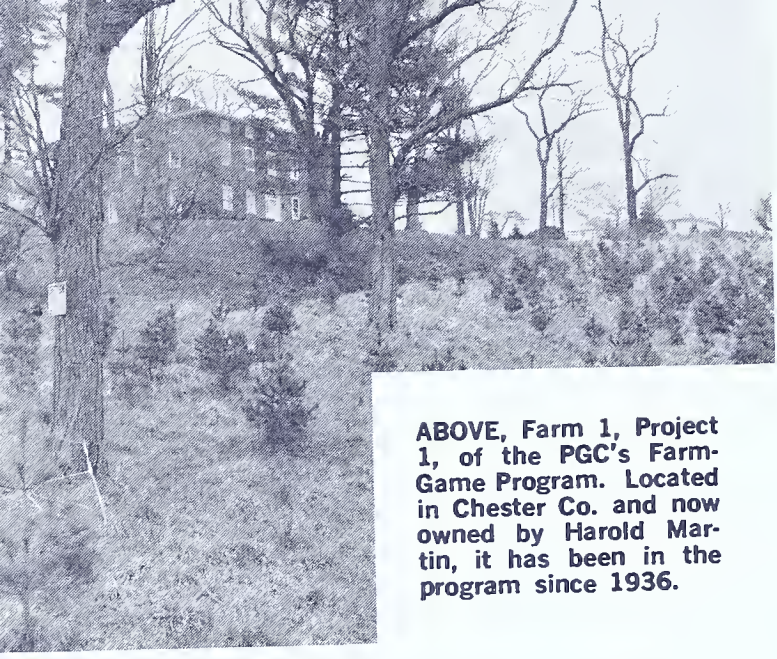
Due to all the excitement, cleaning the bird, and getting him into the freezer, I ended up being two hours late for school. I didn't learn much in school that day anyway. I was too busy showing off my turkey beard and telling the story of my before-school gobbler.

Bicentennial Pennsylvania 1976

So your children can tell their children.

1930 Deer Case Settled

A conscience-stricken Game Law violator has paid his debt to Pennsylvania for an illegal deer killing in 1930. The man escaped prosecution for the violation at the time of the offense, but a nagging conscience moved him to approach the Game Commission in 1960 about settling the case. He was told that the statute of limitations on the offense had expired long ago, and that there would be no necessity for him to "pay up" thirty years later. The man admitted that he did not have sufficient funds to pay the penalty in 1960, but insisted that someday he would be back to square his account. And the man kept his word. Now in his 70s, the man has made a $100 contribution to the Game Fund. The Game Commission will not place a prosecution report on the incident in its files, and considers the case closed.



ABOVE, Farm 1, Project 1, of the PGC's Farm-Game Program. Located in Chester Co. and now owned by Harold Martin, it has been in the program since 1936.



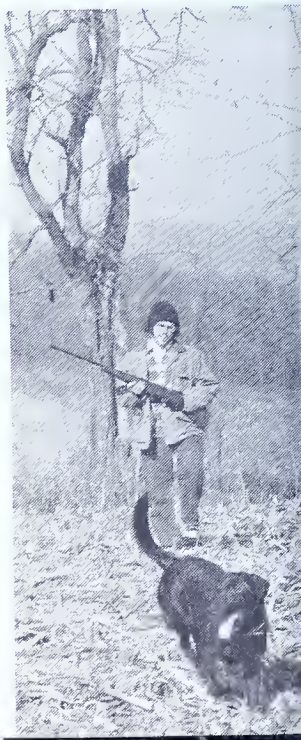
The Farm-

THE GAME COMMIS
almost 40 years old.
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HAROLD MARTIN, above, discusses Farm-Game agreement with DGP Ed Clark. Many thousands of Pennsylvania hunters benefit from this landowner-PGC cooperation.









FIRST auxiliary game refuge, above left, on FG Project 1. Pheasant hunters, in particular, take advantage of "open" private land in southeast part of state.

e Program

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MRS. INA HARTMAN receives Certificate of Appreciation from Carroll Kinley, Chief of Division of Land Management. Mrs. Hartman's farm has been in FG Program since 1937.





FIELD NOTES



Browse Buddies

CENTRE COUNTY – Last winter I noticed an excellent example of "co-existance" between two different wild animal species. In an area where some deer were having a problem finding food, they received some welcome, if unintentional, help from the local beaver colony. In the process of cutting numerous trees for their own use, the beavers also provided much browse for deer in the area.–District Game Protector L. D. Snyder, Milesburg.

Tough Trapping

CAMBRIA COUNTY – Something worse than trap thieves plagued the beaver trappers this year. Rapidly rising and lowering water levels are almost impossible to cope with. In areas where beaver have been causing trouble, too few were being taken. This can only lead to more flooded roadways and clogged road culverts and a lot of additional work this spring for the district game protector. –District Game Protector D. W. Jenkins, Patton.

Travelin' Owl

SOMERSET COUNTY – Lloyd Bittner, who lives on a farm in the Somerset area, recently showed me a certificate of appreciation he received from the Point Pelee Bird Observatory, in Sarnia, Ontario. The certificate thanked him for sending in a band from a saw-whet owl that he found dead beside his corn crib. The owl had been banded at the observatory on November 17, 1970.–District Game Protector E. W. Cox, Somerset.

Game Protector Answers

SCHUYLKILL COUNTY – The January and February issues of GAME NEWS each had one of my Field Notes. A complimentary letter written by a John R. Couden on the February note was received by the Editor of GAME NEWS and forwarded to me. In the January issue, I mentioned the "Uninformed Anti-hunter" and received a xerox copy of this Field Note along with a critical letter written in red marking pencil by an "Informed Anti-hunter" who had some bad experiences with slob hunters. The writer said my title should be changed to "game eradicator." I must agree that we do have slob hunters in the field, and I get much satisfaction each time I arrest such an individual. But just pick up any newspaper and note that this corrupt faction can be found in all groups of our society. The fact that this letter was sent anonymously is an indication to me that Mr. or Ms. Informed Anti-hunter is a coward or perhaps does not have enough facts or information to back up his or her convictions.–District Game Protector S. L. Opet, Tamaqua.

"Who, Where, Why???"

ADAMS COUNTY – Recently, I helped man the Game Commission display at the Harrisburg Sports Show, along with DGP Jim Beard and CIA Lowell Bittner. Here are some of the questions we were asked that day:

"Where is the P.S.S.A. booth?"

"Can I subscribe to GAME NEWS here?"

"Do you have a book on how to get a turkey?"

"Do you have Smokey Bear pins?"

"Where can I buy rabbits for my farm?"

"Do you know where to get those plastic bags everyone is carrying around?"

"Are owls protected?"

"Why doesn't the Game Law protect the fox?"

"I don't want to be what you are, but where can I go to school to learn to stock game?"

"Can I take my hunter's test here?"

"Do you sell fishing licenses?"

"Are you the author of the GAME NEWS?"

"How would you guys like to catch a mountain lion?"

"We're in the rear parking lot—can you tell me how to get to the turnpike eastbound?"

And finally, many people asked if I knew the game protector who was wounded while on patrol in Adams County. I ought to. That was me.—District Game Protector G. Becker, Gettysburg.

Mangy Fox

SOUTHWEST DIVISION OFFICE —While on foot patrol near New Florence, I came upon a red fox which had mange so bad it was almost hairless. If trapping was outlawed, I wonder how fast animal diseases like this would spread.—Conservation Information Assistant J. Badger, Ligonier.



Tiny but Tough

PERRY COUNTY – At one time I thought a mouse was a docile creature that gave in when captured by a predator. I was coming into the square in Loysville just as a field mouse darted across the road with a large cat in pursuit. The cat caught the mouse in the middle of the road, and the mouse reared up on its back legs and struck at the cat's face. The cat got nervous as a car approached and took its eye off the mouse, which made good his escape across the road and through a fence.—District Game Protector B. K. Moore, Loysville.

I Surrender!

CENTRE COUNTY – Clair Burns, of Gatesburg, is an avid fox hunter. While his granddaughter was visiting him last winter, she asked when he got the tame fox she saw in the breezeway. Checking to see what she was talking about, Clair found a gray fox curled up asleep just outside the kitchen door. Clair and other local fox hunters have been scouring the community with their hounds – and having some success – so it appeared that Br'er Fox decided that if you can't beat 'em, join 'em. – District Game Protector J. L. Wiker, Pennsylvania Furnace.

LAND Manager, Not Water Manager!

TIOGA COUNTY—Often the Game Commission is held responsible for many things over which it has no control. Recently I received the most insurmountable challenge of all. Hard rains and a thaw had raised stream levels in the area. While I was shopping in a local grocery store, the proprietor shouted from the back, "What is the Game Commission going to do about the high water?"—Land Manager D. W. Brown, Westfield.



Heavy Pursuit

BRADFORD COUNTY — Some hunters tell tall tales of their hunting ability, especially after they have bagged a piece of game. Such was the case last fall with Bob Campbell of Oberlin. It seems Bob came up to his hunting camp at Roaring Run after bagging a turkey. He took the bird back to camp, laid it on the porch and went in to brag about his hunting skills to the cook. They heard some noise on the porch, looked out the window and saw the turkey running across the yard. They both pursued, and after quite a merry chase the 200-pound cook was able to land on the bird and really bag it.—District Game Protector W. A. Bower, Troy.

Wildlife-People Conflicts

SNYDER COUNTY — Beaver trapping in Snyder County became a reality this year. Luke Glick of RD Selinsgrove, a junior hunter and trapper, caught a 41-pound male in Middle Creek Lake. The beavers have established two separate bank dens on this Fish Commission lake and seem to be thriving despite poor food conditions and human activity. But man and wildlife are not completely in harmony in this situation. Several homeowners along the banks of Middle Creek Lake have suffered due to the beaver's life style. Loss of planted ornamental trees and privately-owned timber make these animals an unwanted nuisance to a select few.—District Game Protector D. Myers, Selinsgrove.

Woody Woodpecker's Escape

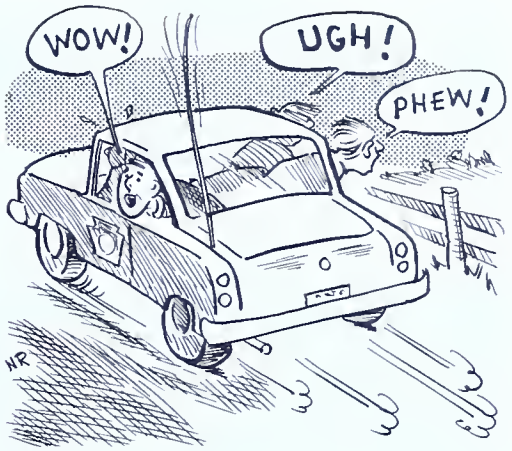
SOMERSET COUNTY — Two men brought in a pileated woodpecker which had an injured wing. They said that as they were driving along a township road, they saw a hawk with a large bird in its talons. As the hawk (a red-tail) started over the field, it dropped this bird and they picked it up. I kept the woodpecker overnight; by morning it had recovered and I released it. — District Game Protector E. W. Cox, Somerset.

Fire Water?

MERCER COUNTY—Deputy Shaw and Bruce Ellis were giving a hunter education class recently to a local junior rifle club. Part of the instruction deals with the danger of drinking alcoholic beverages before hunting or handling a firearm. One young girl raised her hand and asked, seriously, "Is it all right if we drink a glass of water before we hunt?" — District Game Protector L. P. Heade, Mercer.

Windfall Derailment

BERKS COUNTY — Recently, several cars loaded with wheat for export were derailed in an isolated section of Wyomissing Borough. Songbirds and pheasants will no doubt be enjoying a grain bonanza for a long time. When I visited the area, two white-footed mice were busy gathering food. There was enough spilled to supply them and their descendants for years.—District Game Protector J. A. Leiendecker, Reading.



Lesson Number One

VENANGO COUNTY — Deputy Lambert and I arrested a man for poaching deer with a 22 rifle. The penalty was $200 plus costs and confiscation of the firearm. Deputy Lambert had come on the scene just as the shot was fired. After paying his fine, the violator said, "I sure learned my lesson. Never shoot a deer with the game protector right behind you." — District Game Protector L. C. Yahner, Franklin.

•

"Jawohl, Ich Verstehe"

DAUPHIN COUNTY — Since being assigned to Dauphin County, I have become sort of an honorary Dutchman. I guess having a name like Schweitzer helps, but I don't mind telling you that occasionally I have difficulty understanding some of the Pennsylvania Dutch words and phrases. Recently, a farmer called concerning a violation. I stopped at the house and the farmer's wife said, "Jacob iss in the barn butchering a hawk." As I walked to the barn, I couldn't understand why any person would want to butcher a hawk. Well, it turned out to be the kind of hawk we get bacon and ham from.—Jetzt kann ich das verstehen. Kannst du? — District Game Protector J. E. Schweitzer, Hummelstown.

When Near Misses Count

BRADFORD COUNTY — Recently, a live-trap door came down on a skunk's tail while I was releasing it. The skunk liberally sprayed the area without hitting me, but you only have to be in the general area to pick up the aroma. My family insisted that I disrobe and leave my clothes outside. Also, I found it is impossible to remove ALL the aroma from inside a car within two hours. The sportsmen accompanying me to a meeting that evening were emphatic in telling me so. — District Game Protector A. D. Rockwell, Dayre.

Involuntary Bath

CAMBRIA COUNTY—My wife decided to have our car washed while in Altoona. It was the kind of wash where you get out of the car and it goes through by itself. While my wife waited, the attendant called her to the window. As the car was going through the wash cycle, a mouse came out of the grating near the windshield wiper area and walked across the windshield. When he got to the "forced air-dry department," he was blown away. Now a clean mouse is looking for a new home.—District Game Protector D. W. Jenkins, Patton.

Trap Talk

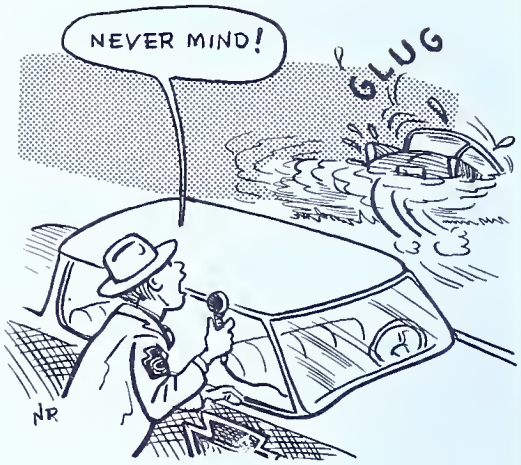
TIOGA COUNTY – Certain people condemn the leg hold trap because they claim it hurts, maims and tortures the animals that are caught in it. However, there are some distinct advantages the steel trap possesses over the body-gripping trap, particularly in regard to beaver trapping. First, it takes considerable skill to catch a beaver in a steel trap, while nearly anyone can catch a beaver in a body-gripping trap. Second, the animal has an opportunity to escape from the leg-hold trap. Third, a trapper can release a small beaver if it's not seriously injured, whereas that same animal would be killed by a body-gripping trap.–District Game Protector J. K. Weaver, Covington.

Mom Knows Best

WASHINGTON COUNTY – While on patrol during the late archery season, I saw a young hunter under an umbrella. Wet snow was falling, and the archer was walking through an open field toward a wood lot. He said that his mother wouldn't let him go hunting in this weather unless he took an umbrella. It reminded me of a time when I was his age and wanted to go hunting in the same type of weather. You know, my mother insisted I take an umbrella, too.–District Game Protector J. M. Kazakavage, Washington.

Unhappy New Year

SUSQUEHANNA COUNTY – On January 2, I was telling some sportsmen with pride that last year I didn't have a single hunting accident of any kind in my district. This was the first such year in 21 as a game protector. That same afternoon I was investigating my first accident for 1975.–District Game Protector N. J. Forche, Montrose.



Wet Wake-Up

CRAWFORD COUNTY–On night patrol this year, Land Manager Miller and Deputy Randall scored a first. They sunk a car. The two found a vehicle blocking one lane of the highway and were unable to awaken the driver, so returned to their vehicle to check the registration via radio. Deputy Randall got the first three numbers, but was unable to get the balance before the car drove off into five or six feet of water. Since snorkels are not issued, the rest of the registration number could not be checked. The shock of the water finally revived the driver, and he got to safety. – District Game Protector H. L. Harshaw, Conneaut Lake.

Thinks Big

McKEAN COUNTY–In early February, I took 30 Boy Scouts from Allegheny County on a hike on State Game Lands 30 in McKean County. While walking, we watched for animal tracks and then had a quiz on the animal. I also asked them to identify some trees. We came to a Scotch pine about 50 feet tall, and I asked if they could identify it. One Scout called out, "It's a Sequoia."–District Game Protector D. A. McDowell, Smethport.

CONSERVATION NEWS

By Ted Godshall



ELMER M. RINEHART, OF STROUDSBURG, seated center, was elected president of the Game Commission at the January meeting. With him are, from left, Commissioners Andrew C. Long, Shamokin; C. Clair Winter, Secretary, Everett; Marshall E. Jetty, Vice President, Brockway; Robert E. Fasnacht, Ephrata; standing, James A. Thompson, Pittsburgh; Deputy Director Robert S. Lichtenberger; Executive Director Glenn L. Bowers; Deputy Director Harvey A. Roberts; and Commissioners Edwin J. Brooks, Lansdale, and R. E. Sutherland, Erie.

Game Farms Welcome Visitors June 8

All Game Commission Farms will hold open house programs on Sunday, June 8, from 1 to 5 p.m. Game Commission personnel will conduct tours and explain how various game birds are hatched and reared. The six locations are: Eastern Game Farm, between Limerick and Schwenksville; Western Game Farm, three miles southeast of Cambridge Springs on Route 408; Loyalsock Game Farm, five miles north of Montoursville on Route 87; Wild Turkey Farm, 17 miles north of Montoursville between Barbours and Proctor; Wild Waterfowl Farm, two miles northwest of Geneva; Southwest Game Farm, three miles south of New Bethlehem near Distant, on Routes 28 and 66. Everyone is welcome.

Ups and Downs

The otter's favorite pastime is sliding. During the winter months, a mother and her young will spend hours every day sliding down steep creek banks.

Record Number of Deer Killed on Roads

Game Commission personnel picked up a record number of deer killed on the state's highways in 1974.

Last year PGC personnel removed 26,445 roadkilled whitetails from Pennsylvania's highways. This is about 800 more than were recorded in 1973, and is ten more than the previous record 26,435 picked up in 1972. The figures include only those animals removed by Game Commission personnel.

The number of deer killed by vehicles in Pennsylvania exceeds the number of whitetails harvested in 35 other states.

Leading counties in highway deer kill in 1974 were Butler with 1133; Venango, 1041; Clearfield, 970; Westmoreland, 943; and Jefferson, 831.

Included in the totals were seven deer killed by vehicles in Philadelphia.

Total recorded deer mortality in the state last year, other than those taken by hunters, came to 34,421, an all-time record. The previous mark, 33,257, was established in 1973.

Increases were recorded in several other categories of deer mortality last year. In 1974 there were 1413 whitetails taken for damaging crops. The figure for 1973 was 1309. Last year game protectors recorded 5398 illegal deer kills, a slight increase from the 5219 recorded in 1973. There was a continued decrease in the number of deer killed by dogs last year, with 524 recorded. In the preceding year, dogs pulled down 553 whitetails. Losses of deer in other categories in 1974 totaled 641.

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Miscellaneous Questions on the 1973-74 Game-Take Survey and Responses

By W. K. Shope, PGC Wildlife Biologist

	Percent Resident	*Percent Non-Resident*
1. Did you hunt raccoon during the 1972-73 season?	5.65	1.38
2. Did you trap in Pennsylvania during the 1972-73 season?	6.50	0.88
3. Did you trap beaver during February and March 1973?	0.70	0.22
4. Did you hunt fox during the 1972-73 season?	8.50	1.25
5. If you hunted fox, did you use dogs?	1.20	ISS
6. Did you hunt bear on November 20, 1972?	12.50	2.30
7. Did you hunt deer during the 1972-73 season?	89.50	48.50

The data shown represent the proportion of respondents from the 1973-74 Game-Take Survey participating in the various hunting and trapping activities listed in the questions. Questions on whether or not individuals trapped beaver, muskrat, raccoon, fox and skunk were asked on the 1974-75 survey and will be presented when the data are compiled.

Not Original But Hard Working

The mocking bird can imitate at least 32 songs of other types of birds.

Big Bluff

The noise made by the ostrich is a roar which, at a distance, cannot be distinguished from that of a lion.

GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9x12 inches on 11x14 heavy, coated paper, without the GAME NEWS logo. The set includes Ned's woodcock from the April 1974 issue; the woodchuck from July 1974; the doves from September 1972, and the buck and doe from the December 1971 issue. These prints are not available individually. The price is $3 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.

Game Commission Thanks Contributors

The Game Commission wishes to thank those individuals and organizations who have generously donated money to the Game Fund. These concerned citizens have certainly done their part for conservation in Pennsylvania. The Commission is permitted to accept donations from any person, association, corporation or firm. Contributions go toward purchasing public hunting lands, which can be used by hunter and non-hunter alike, and for other wildlife management uses.

Waterfowl I.D. Booklet Given With Subscription

As long as our supply lasts, a copy of **Key to North American Waterfowl** will be given free with each 3-year subscription to GAME NEWS. This full-color, 32-page booklet identifies and gives much information on 62 species of ducks and geese. It is printed on "plastic" paper which makes it waterproof, impervious to oil and grease, and essentially tear-proof.

GAME NEWS

Enclosed find check or money order for $7.50 for a 3-year subscription to GAME NEWS. I understand I am to receive a free copy of **Key to North American Waterfowl** with this subscription.

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Pennsylvania's Deputy Game Protectors

By Gerard W. Wendt
Law Enforcement Assistant

WHEN PENNSYLVANIA'S first game laws were drawn up, no provisions were made for enforcing the many new Acts. Prior to 1895, enforcement of the laws regulating the taking of wild birds and animals was the responsibility of local mayors and burgesses, through their police officers and constables. In 1895, Act No. 173—P. L. 273 created the Board of Game Commissioners and authorized the hiring of ten game protectors, one of whom was to be named Chief Game Protector. It soon became obvious that ten men could not adequately cover the entire state, so on July 2, 1903, under authority of legislation, seven deputy game protectors were appointed. By the end of the year this force had risen to 30 men. By 1906, there were eight game protectors, 54 deputy game protectors, and 160 special deputy game protectors.

Through the years many changes have taken place in the Pennsylvania Game Commission, but game protectors and deputy game protectors still perform the major job of wildlife law enforcement. At present there are 120 district game protectors, who are assisted by 1698 deputies. (This includes 67 honorary deputy game protectors who have been awarded this title for efforts and interest in wildlife conservation.)

Who Are These Men?

Do you ever wonder who these deputy game protectors really are? They are interested citizens from all walks of life who have an intense desire to get involved in wildlife conservation and law enforcement. Their regular occupations vary from auto mechanic to zoologist. Many assist the Game Commission with their professional skills as well as performing the duties expected of a law enforcement officer. They give of their time willingly, without thought of pay, often neglecting family, dogs, home and job to work for the Game Commission and, indirectly, the sportsmen of the Commonwealth.

The specific duties required of a deputy game protector are varied and numerous. Picking up highway-killed deer and general law enforcement are the only activities some deputies get involved in. Many others conduct hunter education courses, answer complaints, convince landowners to leave their land open to public hunting, participate in educational TV programs, and fill the shoes of a regular salaried game protector when necessary.

Most of our deputies have other jobs and fulfill deputy duties during their free time, usually on evenings and weekends throughout the year. Many also arrange their vacations to enable them to work for the Game Commission during hunting season. It is not uncommon for a dedicated deputy game protector to work seven 16-hour days during the first week of deer season. He is called out of bed at all times of night to pick up highway-killed deer, assist another officer, or just answer a question being discussed at a local bar.

At present there are deputy game protectors in all of our 67 counties. Their importance in areas where population is high and game rather scarce is just as great as it is in the big deer woods. Many complaints of raccoons, skunks, squirrels, and other animals arise in our cities, and they must be investigated and the nuisance animals live-trapped and moved to more suitable locations. Also in these highly populated areas, the need for hunter education instruction and

public relations activities is much more demanding and requires a staff of competent deputies.

Although the Pennsylvania Game Commission has little to offer in return for services rendered by our deputies, we have numerous applicants every year. These individuals realize they will receive very little pay, no uniforms, abuse from some of the people they contact, a demanding work schedule, and have many unpleasant tasks to perform as a deputy game protector—yet they continue to become involved.

An applicant for a deputy position must be a citizen over 21, a high school graduate, and must successfully complete an extensive written examination. This test consists of 169 questions covering natural history and conservation, law enforcement, English and vocabulary, history and civics, spelling, and arithmetic. In addition to this exam, the applicant's character and standing in the community are thoroughly investigated.

A full day of instruction on procedure, policy, law and related subjects is given each new deputy, and then the deputy is given a commission, identification card and deputy badge. Aside from these three items and various report forms, each deputy must supply his own equipment, including a revolver for use during law enforcement duties. After serving for one year, the new deputy is eligible to purchase and use uniforms and two-way radio units.

In the past, one-week training courses were given to interested deputies at the Ross Leffler School of Conservation, where we train our regular game protectors. These classes cram information on all phases of the Game Commission into five hectic but interesting days. All who complete this week are much better able to carry out their duties than before. Financial squeeze and the training of new game protectors at this facility has made it necessary to curtail this program temporarily, but future classes are anticipated.

A new deputy usually receives the most profitable training by working with a district game protector or an experienced deputy. I began my career as a deputy and can vouch for the fact that on-the-job training with a competent instructor is most beneficial. Our policy, for the safety of all concerned, requires that deputies work in pairs whenever possible.

No "Typical" Day

I have considered trying to describe a typical day as a deputy game protector. After searching my memory for such a day, I find that each was quite varied and had its interesting events—in short, no one day was "typical," and to describe all days that were exciting would require far more space than we have available in this issue.

At this point you may have decided that anyone who would want to be a deputy game protector is not dealing with a full deck. I'm sure that at times some of our deputies wonder about this themselves. However, they made the first move and demonstrated a sincere interest to their district game protector, who is the direct supervisor of all deputies in his geographic district. The game protector had an opportunity to become familiar with the applicant and evaluate interest in this position. After determining that those interested would be an asset to the Pennsylvania Game Commission, an application was completed and the wheels began to turn. Upon successfully completing all phases of examinaion and invesigation, they become Pennsylvania deputy game protectors. To many, this proved to be one of the most rewarding decisions of their life.

HUNTER EDUCATION

By John C. Behel
PGC Hunter Education Coordinator



MOUNTED GAME ANIMAL heads lend outdoor atmosphere to PGC's Southwest Division Office.

Hunting Atmosphere For Hunter Education Classes

HUNTER EDUCATION classes receive a little extra at the Pennsylvania Game Commission division offices. In addition to regular subject material presented by hunter education instructors at the Southwest Division office, the many mounted specimens provide a study in wildlife identification.

North American big game trophies that have been donated by hunters include moose, caribou, elk, sheep, mountain goat, bison, deer, antelope, bear and many others. John Badger, CIA at the Ligonier office and coordinator of hunter education for the SW Division, also provides field scenery and hunting exhibits. To say the least, an awareness of hunting is developed for each student about to embark on his or her first hunt. Although first-time hunters receiving initial organized instruction in safe gun handling may not get an opportunity to match their skill with some species exhibited at Ligonier, the proper atmosphere is set for a youngster's exposure to hunter education.

Each of the Game Commission's six field division offices provides visual aids for good basic wildlife identification. Many hunter education students that otherwise might never see some of the specific wildlife species afield get the opportunity in regularly scheduled classes at the division offices. The magic of deer antler growth and other wildlife curiosities are there for the student to observe.

The Northeast Division office presents a fine mounted display of wildlife. In addition, hunter education

students also receive instruction on identification of Pennsylvania's poisonous snakes. Steve Kish, CIA for the Northeast Division, has provided this and many other wildlife visual training aids for thousands of visitors, Scouts and hunter education students. A huge, age-old hunting tapestry hanging in the Northeast Division office also sets the scene for hunter education classes.

For most of us, hunting bighorn or elk may be only a dream. But for now, hunter education classes provide anticipation of that first pheasant, grouse or squirrel. Ethics, wildlife management, hunter-landowner relations, and safe gun handling all play important parts in a successful hunt.

Wildlife knowledge is often overlooked in favor of basic safe gun handling requirements needed for purchasing that first hunting license, but not so in hunter education classes at Pennsylvania Game Commission's division offices. Wildlife management techniques and thoughts on ethics and traditions of hunting are given to these students and also to the experienced hunter; a hunter education certificate of competency to purchase a first hunting license is only the beginning in discovering the true value—what has been called the "appreciative value"—of hunting.

Next time you stop by a Pennsylvania Game Commission office, take a close look at the traditions and wildlife management practices that have provided an atmosphere of hunting for thousands of youngsters who have successfully completed hunter education training.

Finding A Place to Hunt

MORE HUNTING licenses are being sold now than at any time in our history, and hunters are increasingly concerned about a shortage of places to pursue their sport. This is complicated by the fact that more private lands are being posted because of inconsiderate hunters not asking permission and other bad hunting manners. Some lifelong outdoorsmen have even been heard to mutter about quitting the chase because it's just too much trouble finding a place to hunt. Fact is, there is plenty of high quality hunting to be had, and plenty of game too, thanks to the efforts of conservation-minded sportsmen and wildlife managers.

There are basically three places to go in search of hunting grounds: public land, privately owned land, and daily-fee shooting preserves. Each offers advantages.

Every state offers large tracts of land for public hunting. The Pennsylvania Game Commission has purchased over one million acres of State Game Lands for wildlife restoration and public hunting. Funds for this came from hunting license sales. In addition, many states operate "co-ops"—private farms administered for public hunting by conservation agencies. Cooperative landowner agreements with the PGC provide over 5 million acres of private land for public hunting through Cooperative Farm-Game, Safety Zone and Forest-Game programs. Federal and State Forest holdings in Pennsylvania contribute another 2½ million acres for public use, much of which is available to public hunting.

About one-third of Pennsylvania is available to public hunting and many more private lands will open if the price is right. That price is a better code of hunting ethics headed by courtesy and respect for the landowner. Probably the best thing about public hunting land is that there is always a place to hunt. Of course, some areas may be crowded during the first weekends of the season, but

it is surprising how fast the crowds thin out as the season progresses. For those who can steal a day or two between Monday and Friday, public land can be a positive paradise. Information on public hunting areas—often including maps—is available from state game departments.

Privately owned land, whether it belongs to a farmer or a large corporation, still aflords great hunting opportunites. But to avoid wasting time when it really counts—during the hunting season— it pays to make contact with landowners during the spring and summer months. Then, just before opening day, call or visit to confirm your access to the land. After that, you can keep the door open by remembering a few simple rules:

Stop and check in with the owner every time you hunt.

Keep well away from livestock and buildingss; do not harm property in any way.

Report vandalism and poaching.

Express your appreciation to the landowner. It's through his courtesy that you have a place to hunt.

Keep in mind that you are a guest.

Finally, many hunters can turn to the commercial shooting preserve. This is a good choice for some hunters, especially those living in large cities who are unable to keep a good dog and are short on time to find and scout public or private terrain. Preserves subscribing to the standards of the North American Game Breeders and Shooting Preserve Association feature savvy bird dogs, plenty of action and a variety of game from quail to wild turkey, depending on location. Other advantages offered by preserves include seasons as long as six months and ideal settings for starting the young gunner off right.

So, take your choice: public, private or preserve. Hunting is out there for the asking if the sportsman is willing to put in even a fraction of what he takes out. Planning ahead is half the fun anyway, and a good day in the field is well worth the effort.

Available Publications

The following publications are available from the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120. Prices quoted include taxes, handling and postage.

GONE FOR THE DAY, by Ned Smith. All of the outstanding columns and artwork which appeared under this title in GAME NEWS during a four-year period. Delightful reading for everyone. 216 pp., $2.50.

THE WHITE-TAILED DEER IN PENNSYLVANIA, by Stanley E. Forbes. Detailed information on all phases of the whitetail's life. 40 pp., 50 cents.

KEY TO NORTH AMERICAN WATERFOWL, by Wylie and Furlong. Full-color guide on "indestructible" paper. 32 pp., $1.50.

BIRD AND MAMMAL CHARTS, by Ned Smith. Set 1 (20" x 30") $2.00. Winter birds, marsh and water birds, waterfowl, birds of prey. Set 2 (20" x 30") $2.00. Mammals of farm and woodlot, mammals of the mountains, birds of the forest, birds of field and garden. Set 3 (11" x 14") $2.25. All eight charts listed in Set 1 and Set 2. Individual charts not sold in either size.

Lights, Action . . .

CAMERA!

By Susan M. Pajak

LUCKY IS THE guy whose gal is willing to tag along with him into the woods loaded down with cameras and film ready at the snap of the shutter to record for posterity (if only to be pasted in the family album) his accomplishments as a responsible hunter—the trophy buck, a handful of squirrels, a sprinkling of bunnies . . .

But luckier yet is the gal herself because she will "see" and record on film the before's and after's of the hunt as well as the delicacies of the outdoors around her—such as, perhaps, deer scooting away, birds, chippies, wildflowers . . .

A goodly number of us WHP (writer/hunter/photographer) types hardly ever get the chance to film all the details of a day's hunt. We'd like to, but it's rather tricky to squeeze off a trigger and snap a camera at the same time. And with the same finger.

But with a deep and sincere interest in outdoor photography, my fair lady CAN picture the world and all that's in it and maybe later on her skill with the camera could pay off in $$$.

I've learned that outdoor editors prefer to look at **action** photographs, significantly posed photographs, critically sharp 8 x 10 black and white (not gray and white) glossies (or a contact sheet), well-composed photographs . . . well, you get the picture.

A series of photos of a motionless deer might be beautiful, but try for the extra shots that show one in alarm as it wheels away from you. (Note: please refrain from sending in a bunch of deer pictures to this magazine's editor lest he wring my middle-age neck.)

Take photos of people in action—



PIC SNAPPED during training session with Lab is typical of the type of action shots which editors like. People or animals doing something are more interesting than posed shots.

walking, arguing, laughing, unloading the camper, cooking, etc. **All** "portrait" photos where folks simply stare at the camera in the classic frozen smile are becoming passe.

Significantly posed pictures, and these are necessary at times, too, must be sharp and "filling"—that is, a 'chuck hunter and the game animal look better photo-wise when at least one of the photos is taken at 20 feet rather than at 100 yards. Details such as facial features are important. If the person's eyes are two dark holes or the face is shaded by a hat brim, use a fill-in flash.

If you can't hold the camera steady long enough, mount it on a tripod and use a cable release. Fuzzy pictures are rejected most of

GIRLS, GUNS, & GAME...

the time. Watch your backgrounds and avoid posing people in front of huge trees, garbage cans, outhouses and the like.

Compose your pictures. If you are continually cutting off heads, it's safe to say you need a refresher course in photo composition. Take some photos "in close" as well as at normal distance, but watch the composition. And keep your horizon horizontal. Trees growing at an angle because the camera was "held crooked" are not pleasing to the eye.

Color photos and transparencies are expensive to produce (and reproduce) and hard to sell unless the moon is in the proper phase and the editor just happens to need one at the moment—which at times is like waiting for a gift package from Fort Knox. But do take some colors for yourself.

Nature photos — plants, bugs, mosses, etc.—are exquisite in color. Here, again, closeups must be sharp. A series of shots, perhaps of a spider making its web, can be most appealing. Try a polarizing filter for taking color pictures in the bright sun or on snow or water.

Mailing in photos for an editor's perusal demands large envelopes with stiff cardboard backings plus enough return postage. Your name and address goes on the back of every photo. I once saw some photos that were folded in half! Never, **but never,** fold a photo.

The biggest requirement in successful outdoor photography is you yourself. Hang loose. Don't avoid taking a picture because it may cal for you getting on your knees o back or bottom. Live with you camera and let it express your in ner self because this is exactly wha it is going to do.

Take lots and lots of pictures Experiment. Try different shutte speeds; bracket, snap, push and flash. I can't (and won't) promise that you'll sell any right off, but do (and will) promise you a view o the world you have never seen be fore. And so what if some folk laugh at your endeavors? Someday you may be laughing, too, all the way to the bank! SMILE!

* * *

(Send me a stamped, self addressed envelope and I'll send you my homemade spaghetti sauce rec ipe for canning using garden-grown tomatoes: 208 McLay Drive, Eliza beth, Pa. 15037.)



Outdoor Clothing in the Seventies . . .

Slick, Stylish and Serviceable

By Les Rountree

IT TOOK A long time for U.S. manufacturers to discover that there was a market for clothing designed for outdoor use. On the other hand, maybe it took a long time for American outdoorsmen and women to demand it. During Grandpa's day, the only special clothing available for outdoor use was a pair of canvas pants that were as stiff as a frozen wash line in January and the black-and-red hunting outfits that weighed forty pounds when dry and ninety-seven when wet. Fishermen had a few canvas vests available to them, but the hiker had nothing. Some fancy hiking gear at very fancy prices was available from a few selected importers, but little else.

Hardly a week goes by these days that doesn't see a new shirt, trousers, hiking boots or other item of apparel introduced that is especially for the hiker. Great! For the serious walker or camper, the selection is terrific. There's one fly in the ointment, however—testing this array of outdoor goodies is seldom done with much thought. The designers often dream something up that is very stylish but not very practical. (I have learned that designers seldom go camping or hiking.) But the designers can't be blamed for everything. We have a pile of people today who want to look like rugged outdoor types and wear the outdoorsy stuff but never get further away from civilization than the A & P parking lot. Improves their image and all that.

All of this fancy-dancy outdoor clothing is fine if one wants to look chic at the neighborhood barbecue bash, but for the gal or guy who wants something serviceable for camping, hiking, hunting or fishing, a lot of this stuff just won't cut the mustard. Not that real honest to goodness outdoor clothing has to look like something that came from World War II surplus—far from it. Long lasting outdoor clothing *can* look nice and be serviceable at the same time.



DOWN VEST is a great item for cool weather backpacking trips. It stuffs into a tiny space when not needed, provides plenty of warmth in camp after the sun goes down.



10X MESQUITE SHIRT is lightweight for hot weather wear; pocket style and epaulets give military flair. Below, Orvis warmup pants are great for camp use in chilly weather.



BAUER'S Alaska shirt and whipcord pants are neat and rugged. Below, Gokey's Sunbeater blouse and light cord pants; fine for summer use.





Almost anything will do for hiking and general outdoor apparel, but cheap, bargain basement merchandise won't last long on the back of an interested and active outdoor person. Nor will it fit as good. I wish I could provide a list of stores in every town in Pennsylvania that offer a wide range of sizes and styles. I can't. Nor could I offer such a list for any other state in the U.S. A few high-falutin' stores in some of our large cities have a good line of outdoor clothing and some of the newer specialty shops that cater to back-packers are beginning to make an appearance (if one of these is near you, check it out). The very best outdoor gear in this country is available via mail order from the top flight houses. They cater to the outdoorsman. It's their bread and butter and seldom do they list anything that hasn't been reasonably well tested. They don't like to exchange things any more than you do, so they'd rather have it right the first time.

For spring and summer outdoor use, here is a list of items that I've tried out recently and found to be good values. (Suppliers' addresses are listed at the end of this column.)

Gokey's offers a men's trail shirt that is a dandy. Tan poplin and cut fully. Will fit all but the tallest person (over 6-2). This is a short-sleeved shirt that can be worn under a jacket on chilly days and won't be too hot on warm days. It's stylish, too, featuring the epaulets that are all the rage these days. Darned if I know what to do with epaulets, but they look nice.

This company also offers the popular Rough Rider line of slacks and shorts. These are made in olive and tan corduroy and in a light twill that is perfect for summer walking. The cuffed shorts are especially nice. If anyone looks terrible in shorts, it's me . . . but these shorts are non-binding and smooth looking. They're made in ladies' sizes too. Like all other mail order houses, Gokey's offers the chamois shirts that are so great for warmup wear or as hunting and fishing shirts on cool days.

All companies are paying more attention to ladies' gear these days and it's about time. In case you never noticed, women are built different than men and male-styled outdoor clothing looks strange on a female frame.

Sunbeater

For summer hiking or just fooling around in the backyard, Gokey's has a light sleeveless shirt for women they call the Sunbeater. Will pack into a knapsack with ease, is made of stretchy material for active women and should dry in ten minutes on a breezy day.

The Orvis Company, up in Vermont, is better known for fishing tackle than clothing. However, they have an excellent line of outdoor clothes. Their fishing shirt could be called an "everything" shirt. Made from lightweight poplin, the avowed purpose of this shirt is for fly fishermen to carry their goodies in without getting overheated in a heavy vest or jacket. The over-supply of pockets will serve the walking backpacker well, too. The sleeve pockets and the large bellows type pouch in the back will lug a bundle of odds and ends. Great for the hot weather hunter who wants to pack a sandwich and other sundries.

Orvis's Field Shirt is another all-purpose khaki item that feels good and has enough style to be worn anywhere. The semi-dress shirt collar wouldn't be out of place with a necktie and sport coat if you got in a bind.

I wouldn't want to carry them backpacking, but Orvis also offers a slick item called warm-up pants. A great thing to have at base camp when legs are cold and tired. These insulated trousers zip up both legs and are slick for slipping on over underwear or right over top of another pair of trousers. Super heat in seconds. Orvis also has a continually

expanding line of ladies' gear that is well proportioned.

Calling it like I see it, I must mention that the green shorts for men in the Orvis line are cut too skimpy in the leg for those of us with well developed thighs. They don't slide up and down with normal body movement and my guess is that they'd be uncomfortable for me in hot weather. If you're skinny . . . no problem.

Ten X has been making outdoor clothing for years and here *is* one line that is available in a number of local stores. Known more for their hunting gear, recent years have seen the addition of lighter weight camping and trail items. Their short sleeved Savannah and Mesquite shirts are good looking and super rugged. Two bellows pockets in front and epaulets, of course. Ten X also markets a down vest that should not be overlooked for spring and summer hiking in Pennsylvania. It takes up no more room than a softball would when wadded up, so could be easily carried in the backpack. There are nights (and some days too) when an easily packable vest will be welcome.

Old Reliable

L. L. Bean, the old reliable house in Maine, continues to provide mail order customers with a fine line of trail and camp wear. They, too, handle the Rough Rider line of shorts and trousers and for a comfortable walking pant, these are tough to beat. They also have a pair of trousers that really caught my fancy. It's called the Hiking Trouser and comes in loden green. It's a fifty-fifty blend of cotton and polyester that not only looks good but should wear like iron. This pant features the patch pocket on top of the slash pocket that is very popular these days. The Rough Riders are made this way too. I seldom use the patch pocket, but a lot of people do. Anyway, it looks nice. The Maine firm also has a slick pair of ladies' and men's hiking shorts—they call them britches—that



are a light putty color with the patch pockets and stylish cuffs. They fit well, too.

I don't know if Bean's invented chamois shirts, but they have been in their catalogs for years. Too warm for all day wear in the summer, but they make a great warm-up jacket for evening wear. If you've never owned a chamois shirt, you're missing something. They just get softer and softer with each washing.

Eddie Bauer, the Seattle, Washington, firm that started the nation wearing goose down jackets back in the '30s, has blossomed into a major mail order source for all sorts of clothing. They too have enlarged their ladies' line. They offer the neatest corduroy shorts and slacks imaginable. The double pocket treatment again, and the medium-brown color with the wide wale is great looking. One word of caution, though. Bauer is having trouble with their ladies' sizes. The trousers are not always amply cut for a woman's hips and tend to be a bit short between waist and crotch. Advice on ladies' pants is to order a size bigger than you really wear. Hopefully, they will get this problem solved, for their pants are of excellent quality. Bauer is also redesigning their ladies' shirts which had been a bit baggy and short.

For men, the tan plaid Desert Cloth Shirt is a favorite. Double pockets with epaulets and fully cut for comfortable walking. This shirt can be worn anywhere and it's durable, too.

They can't be called summer trousers, but Bauer's grey whipcord pants are the best looking, all-purpose outdoor pant I've seen in a long time. Of 100 percent wool and super-tight weave, they're suitable for all sorts of camping and even hunting. They

too, have the patch pocket over top of the regular slash pocket and wide belt loops. Color is a serviceable steel-gray. Not itchy or scratchy and should last for years with reasonable care. They are called Backpacker Pants in the catalog. Made in women's sizes, too. Incidentally, ladies' wool pants are tough to find.

I've done business with all of these concerns and many others over the years. Getting clothing through the mail is not nearly so difficult as it may seem to those who have never tried it. Follow the measuring instructions carefully and if you have a particular fitting problem, mention it on your order. If there are peculiar sizing characteristics common to a special item, they'll take it into account. No quality mail order house will ever refuse to exchange anything if it is unused.

Contrary to some beliefs, mail order stuff is not necessarily more expensive than comparable items at other stores. Sometimes it is actually cheaper. Even on the items that are priced higher, no gasoline or traffic problems are encountered when shopping. The goods come right to your door.

On the other hand, mail order shopping is not for everyone. Persons who are especially hard to fit could be making a mistake to order from them. If you have a size problem, it's always best to try on the merchandise before laying down the money.

The old adage of getting what you pay for is never more true than with outdoor clothing. Anything can work as outdoor gear but it seldom lasts as long or fills the bill as nicely as a properly designed item. A fifteen-dollar shirt for camping, hiking or hunting might seem like a terrible extravagance, but the cut and finish of much of today's outdoor wear makes it suitable for all around use. In the end, a better bargain.

You won't necessarily walk any faster, shoot more birds or catch more fish if you're wearing a quality trail shirt or hiking trousers, but you'll feel better doing it. And if you just want to look outdoorsy when you hit that supermarket parking lot or get invited over for hamburgers in the neighbor's backyard—what's wrong with that?

For catalogs from the companies mentioned, here are the addresses:

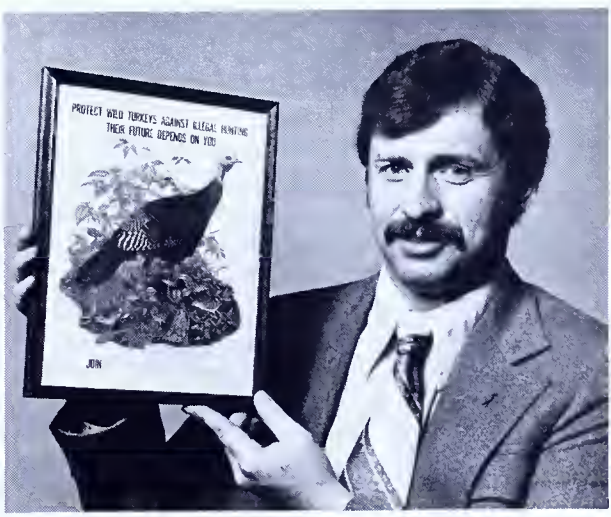
Eddie Bauer
1737 Airport Way So.
Seattle, Wash. 98134

L. L. Bean Inc.
Freeport, Maine 04032

Gokey Co.
21 W. Fifth St.
St. Paul, Minn. 55102

Orvis Company, Inc.
Manchester, Vt. 05254

Ten-X Manufacturing Co.
6185 East Arapahoe Rd.
Boulder, Colo. 80303



ILLEGAL HUNTING is a problem facing the wild turkey in some parts of this country, according to Tom Rodgers, executive director of the National Wild Turkey Federation. To draw attention to this, the federation is distributing the poster shown here by Rodgers. Free for display in gun and tackle shops, hunt clubs, etc., from the NWTF, P.O. Box 467, Edgefield, S.C. 29824.

Spring, for Bowhunters, Can Be . . .

TURKEY TIME!

By Keith C. Schuyler

Photos from the Author



AFTER AN HOUR or so of hearing turkey gobblers respond to a call without moving in our direction, it seemed that we might finally be in business. It was the first morning of Pennsylvania's first spring gobbler season in 1968. Behind and slightly above me, we had one of the best callers in the business, the late Lou Stevenson.

And he had a turkey coming our way!

Directly above me, Earl Wise was posted with only a camera. Nearby were Harry Allaman, outdoor TV personality, and Den Austin, of Quebec, Canada. Each had a shotgun. Lou had taken a turkey the previous fall, so was unarmed. My high-strung hopes rested somewhat nervously on a Wing takedown bow that would deliver an arrow with 50 pounds of thrust.

When I spotted the big gobbler, it was taking a determined course near Earl who remained frozen, fearing to lift his camera since it might alarm the turkey. It was a long shot for me, too close for complete safety to Earl. I, too, held.

The old boy strutted on past, out of our sight. Within moments, Harry's 12-gauge boomed and we could hear the turkey's wings beating out a finale to the little drama. It was a scene to be repeated many times that season and over the next six springs in Pennsylvania. It will be repeated again this month, with this season increased to three weeks, May 3 through May 24. A spring gobbler is now permitted on the same license even though you scored in the regular autumn small game season.

There is a reason for repeating briefly the previous hunting experience (which was the subject of a feature in "Outdoor Life," April 1969): it illustrates that "old ugly head" can be brought within bow range. Harry's turkey, an old, and presumably wise, tom that weighed in at just over 20 pounds, had walked right in among five hunters. It had

WISHFUL THINKING! That's Harry Allaman's gobbler that Schuyler is hefting, taken with shotgun on the first day of Pennsylvania's first spring gobbler season

walked past two of us to get to Harry!

It was a credit to Lou's ability with one of his own callers (he manufactured them for many years in Wellsboro). The situation also reflected favorably upon Earl, who let the turkey walk past him within easy bow range. It further illustrated the tolerable visual limits in hunting the wise old bird. This was not a young, unsophisticated tom bumbling along the side of the mountain—not at 20 pounds!

Obvious Clue

One of the most obvious clues to be taken from this, and additional experiences that came later, is that a properly hidden bow hunter does have a fair chance to score on turkeys.

"Properly hidden" covers a lot of territory. A camouflaged bow hunter can be properly hidden even though a considerable portion of his covered anatomy is exposed. The most important item to take into consideration is the need to make the necessary move for the shot without permitting the turkey to see it. This can be extremely difficult in the bare woods of mid-spring. It takes real woodsmanship to make one's self invisible to eyes as sharp as those of a turkey.

Despite the usual lack of apparent ready cover, there are such aids as windfalls, redbrush, laurel, evergreen trees, etc. Even camouflaged, a stationary figure will not always escape the ever-watchful eye of a turkey. But a motionless form that blends in with its surroundings will not alarm the bird. Camouflage can be extended to a face mask or application of green camouflage cream to the skin. Even the hands—particularly the hands—should be covered or marked to make them blend in with the general camouflage effect.

As an important aside, a completely camouflaged turkey hunter must be continuously aware of a certain vulnerability to the hunter who doesn't practice complete safety in the woods. There have been serious injuries resulting from careless shooting at movement accompanied by turkey calls. It should be sufficient that a hen call is used, for a hen turkey is illegal quarry (unless it happens to be a rare specimen sporting a beard), but don't count on it. Most hunting mishaps don't make much sense anyway. Be aware of other hunters. Having the law on your side is little comfort if you are the victim of a hunting accident.

If you go to the trouble to effect complete camouflage, don't let something so obvious as a wristwatch spoil your costume. If you wear one, make sure it is well covered by your sleeve. Don't sew a brightly colored club patch on the shoulder of your camouflage suit. And keep in mind that turkeys are not colorblind. Much of my big-game hunting with the bow is done in a red camouflage suit, but when I go for turkeys, I go with green. Splotches of black, brown and tan will work equally well if the surroundings are such that it will blend with your background.

Keep movement to an absolute minimum. Since spring turkeys are legally taken only when utilizing an artificial call, you have a choice in choosing the call which will answer the need for minimal movement. Experienced turkey hunters know that the big birds have the caller located by sound some time before they make their appearances, and it would seem that the slight movement required to operate a hand call would unlikely be a deterrent. However, the fact that some gobblers will come in silently, or stop answering when they get close to the hunter as they approach, poses a problem. Any movement that the bird detects, even from quite a distance, can be defeating.



For this reason, my choice is the diaphragm call which fits the roof of the mouth and which leaves both hands free to handle the bow. For years I have used the Penn's Wood call which is manufactured in this state (Box 41, Delmont, Pa. 15626). You can gobble acceptably with the call, and it produces a most deceptive hen voice.

People with delicate gag reflexes have a bit of difficulty using such a call. But if the tongue is used to hold the call lightly against the roof of the mouth, and a gentle "chuck, chuck, chuck" is attempted, a beginning sound should result. Once this is mastered, it is fairly simple to purse the lips and cheeks to effect a call that sounds sure-enough like a hen turkey.

Use Call Sparingly

Whether a mouth call or a hand call, such as a box, slate, or whatever, is employed, it should be used sparingly. If a gobbler responds after a few seductive "Peeerk, perk, perk, perk's," the caller should restrain himself and hold his calls to at least five minutes, preferably longer, apart. Don't appear overanxious. It is better to concentrate upon making each call as realistic as possible rather than to fill the woods with your proud rendition. One bad response will make the old fellow suspicious.

Assuming you haven't merely aroused the interest of a gobbler who is already with a hen, or hens, and is merely proclaiming his masculinity vocally with no intent of leaving his "bird in the bush," stop calling entirely when the approaching turkey is just out of view. He'll know exactly where you are. Get your bow in position so that the minimum amount of movement will be necessary to get off a shot.

Keep alert. The gobbler may circle a bit and come in at an angle other than expected. Once he appears, stay frozen. Let him come in close enough for the shot before you start your draw. Even then, watch his head; try to choose a time to draw when his eyes are behind a tree or a bush. If the tom wants to walk past, and you haven't had a chance to make a draw unobserved, let him. Should there be no cover to shield your movement, you have a better chance from behind to get off an arrow in one smooth action before the bird takes off on a run or jumps into the air.

Trying to cover each situation that might present itself would use up more pages than are in this entire magazine. So, the comments presented here are generalizations for the bowhunter. The system has provided action for me; it has also brought some frustrations.

One thing is certain. If you can get an old gobbler to come in to your stand, you will experience one of the greatest thrills in hunting. You know before you attempt it that you are bucking tremendous odds with a bow and arrow. Even if everything between you and the turkey turns out as well as you might have hoped for, you still must be able to place an arrow into a relatively small target.

Before even considering a hunt for turkeys with a bow, you must be willing to count the experience as satisfactory whether or not you score. If bringing a turkey in to where you *know* you could dump him with a gun is going to bring bitter disappointment because he's still too far for an arrow, leave your bow on the rack.

But if you are willing to risk blowing a chance at a trophy that is considered by many hunters to be more important than a deer, there is the business of tackle to consider.

There has been considerable emphasis on camouflage of clothing and exposed parts of the person, and the same must hold true for the bow, quiver and arrows. If you use bright fletching on your big-game arrows, change it. Or use a can of car primer to darken your feathers or plastic vanes. You should use broadheads. Turkeys are big game.



GOBBLER HUNTING WITH A BOW is tough; plenty of before-season practice under typical woodland conditions is strongly advised.

Feathers are difficult to penetrate. Consequently, multiple-blade heads of somewhat narrow width are recommended over wide broadheads. They should be *sharp!* It is likely that the arrow will remain in the bird. This is all to the good, for it will help retard the escape of one that does not drop immediately to the shot.

The same bow you take for deer is not too heavy for turkey hunting if you can handle the weight well. It should not have any shiny surfaces or bright markings. If you don't want to mess up the beautiful finish on your bow, cover the limbs with bow socks.

Choice of quiver type has little significance, but, again, camouflage is important. Rarely if ever will a second shot at a bird be possible. In all of my personal experience hunting turkeys with a bow, one arrow would have been sufficient. However, it is always sensible to have a spare or two for the exception. There is also the possibility that more than one arrow may be needed in the event that a first hit does not put a gobbler down for keeps.

Strangely, although many game birds seem to be extremely difficult to stop on occasion when it comes to taking them with birdshot, an arrow usually spells a fast finish. I have found this true even with the ring-necked pheasant, a notoriously tough bird.

Although it's unlikely you'll have much choice in selecting your shot at a gobbler, frontal hits are the least desirable. The vitals are protected by the fleshy breast, and an angling broadhead is apt to be deflected by the heavy layer of close-lying feathers. An arrow from the side or rear will have much less difficulty in finding its way to a vital spot. Practice at turkey-size targets beforehand is important from all angles!

Despite all the foregoing, there still remains the problem of finding a turkey. Also, finding turkeys which have not become extra wary from heavy hunting poses a challenge.

It was predicted here that after the first spring season on turkeys the word would get around and the birds would become even more difficult to fool than might be expected from their inherent wariness. There is every reason to believe just that. Of course,



TYPICAL ASSORTMENT of callers used to lure in (sometimes!) spring gobblers: slate call, can-type mouth call, diaphragm mouth callers and box call. Each has advantages and disadvantages.

weather has much to do with the season, as hens nest somewhat according to the temperature.

The spring season of 1974 was a good illustration of weather conditioning in our area of the state (northeast). There were many signs that gobblers were still with the hens, at least in the early part of the season. Although it was not difficult to get a response to a call, the male birds were simply not coming in well. It is reasonable to believe that this was one good reason that hunting was tough. Add to this the fact that this was the seventh such spring season and it can be believed that the birds are becoming more wary.

Another growing difficulty with special significance for the bow hunter is the increasing popularity of the spring hunt. With a multitude of hunters yelping throughout the more obvious turkey territory, the birds are certain to become more confused even if they haven't added to their smarts. Just the movement of so many hunters will have the turkeys milling around, but such action is more apt to be advantageous to the gun hunter with his more certain firepower than it is to the ever-hopeful bow hunter.

It follows that the smart hunter will do some pre-season scouting in an effort to locate some birds as far back in as practicable to avoid the human traffic. The prospect might require a long walk before daylight just to be in position for the opening hour, but it could well pay off in better hunting. Of course, you risk the possibility that others will have the same idea, and you may find plenty of company the first morning in an area you thought to be quite isolated.

If you have knowledgeable companions, the odds for success increase for everyone if you hunt together. There is no way of knowing for certain from which direction a turkey will approach. If the caller is bracketed by other hunters, it is much more likely that *someone* will get a shot. Positions can be switched from time to time to even up the individual opportunities.

One other thing. Keep alert whenever you are in turkey country and it is legal shooting time. Turkeys frequently roost in big timber, and you may be able to spot one high overhead. If it is close to your calling site, it may not answer. *Just make certain that it sports a beard.* Not all hens may be on the nest.

So, there you have it. There may be as many ways to get a shot at a gobbler as there are archers willing to try. The preceding has worked for me.

Nevertheless, it is no pure coincidence that I always plan my turkey hunting with the bow in good trout fishing territory.

———

Oops! February column had Blaine Long, Benton, first contestant in NAAA Indoor in bowhunter division. It should have read, ". . . first bow hunter contestant in 900 Round at PSAA Target Tournament, Valley Forge."



SOMETIMES THE SEARCH FOR a dream rifle takes a shooter a long way. Here is Lewis with his current crop of chuck busters.

THE DREAM RIFLE

By Don Lewis

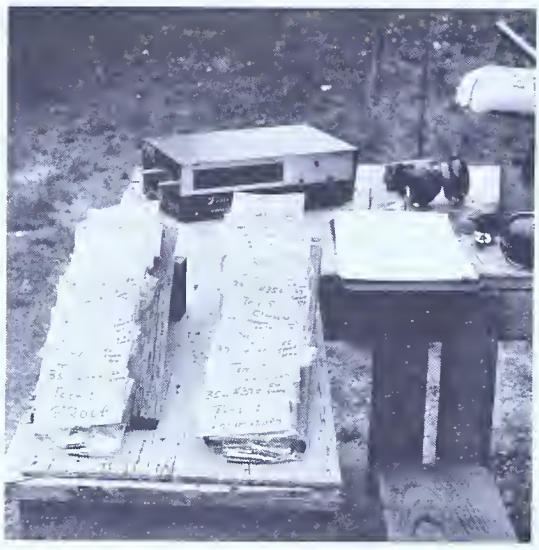
Photos by Helen Lewis

I STOOD AT THE window and watched a mixture of snow and rain battle for control of a late afternoon in April. Two years had passed since I left the military service, but I was still trying to make up the varmint hunting time lost in World War II. On this particular day my body ached from some virus, but my bloodstream yearned for an early spring warmup on crows. Right then, all I could do was watch and dream.

The years after my discharge brought heavy financial responsibilities that kept eating deeply into my paycheck, and much as I wanted a new varmint outfit, I knew I would be starting the season with my vintage Hornet. I continually dreamed of a better outfit and vowed it wouldn't be long until a sleek, custom made rifle would be mine.

Varmint hunting at that time was getting disdainful looks from most hunters, and even most gun companies weren't making much effort to come up with anything more potent than the 22 Hornet or 218 Bee. While I dreamed of a custom outfit, I accepted the fact that my new rifle would be a Winchester Model 43 in 218 Bee. The 23D Savage I was using had seen its better days and, due to a pitted barrel, its accuracy was questionable.

The new Model 43 arrived, but to my dismay, it was chambered for the Hornet. I was disappointed for sure since quite a controversy boiled over the Hornet and Bee, and I had been swept up with the tide of Bee believers. I had shot the Hornet extensively, so it was only natural I would want the Bee, which was supposed to be far more potent. I later



BENCHREST testing for accuracy and chronographing for velocity is the only way to actually know what a given rifle/load will do. These are 22-250 loads ready for chronographing.

learned that wasn't exactly true, but in those days I accepted the wild elaims without hesitation.

The new Hornet turned in a star performanee for a few years, but was traded for a nearly new 222 Remington seoped with an 8X Unertl Varmint scope. For the first time, I had what I thought was the ultimate in a long distanee eartridge. I made some super long shots that I know now were far beyond the accepted maximum range of the 222, but at that time distance was a paramount goal.

Since those years, I've had thc good fortune to handle and fire practically every varmint cartridge to hit the market in a wide variety of rifle models and types. All this experience has proved I expeeted too much from the 222 Remington. Some won't agree, but I see the 222 as a 275-yard cartridge, with best results coming under the 250-yard mark.

Practically in thc twinkling of an eye, varmint hunting eaught on and gun companies gave undivided attention to the varmint-type rifle. Magazines gave more space to varmint hunting articles, and it wasn't long until heavy barrel outfits appeared. I latched on to a Model 70 Winchester 243, and was again satisfied I had the super eartridge I so badly wanted. I aetually felt distance would never again be a factor. With a 75-gr. bullet, the 243 would hit a blistering speed of 3500 fps, and this was what I needed; or so I thought.

During the decade that followed the end of the war, my thinking ran strietly along the super eartridge line. My association with the common 22 rimfire had been long and extensive, and I knew its ballistics thoroughly. As I moved up through the gamut of centerfires, beginning with a passing acquaintance with a 25-20 and then using the Hornet, Bee, 222, 220 Swift and ending with the 243, my constant thought was getting a more powerful eartridge. Distance ruled my thinking, and speed seemed to be the way to handle the long, long shots. The 220 Swift had all the others beat in the velocity column, but the light bullet was no mateh for even a slight wind beyond 300 yards.

It wasn't too long until I found the 6mm bullet also had its limitations. I stayed with bullcts below 90 grains beeause I wanted high velocity. When I learned the 100-gr. 6mm bullet gave good results, I was automatically set up for the next bigger cartridge whieh came in the form of a 25-06 Improved. The "improved" part is nothing more than eutting a sharper shoulder anglc in the chamber and fire forming the case to fit it. The end result is a slightly larger case eapacity. Here, again, I soon learned the extra two or three grains of powder did littlc to enhance the 25-06's performance.

The strange part of all this was that



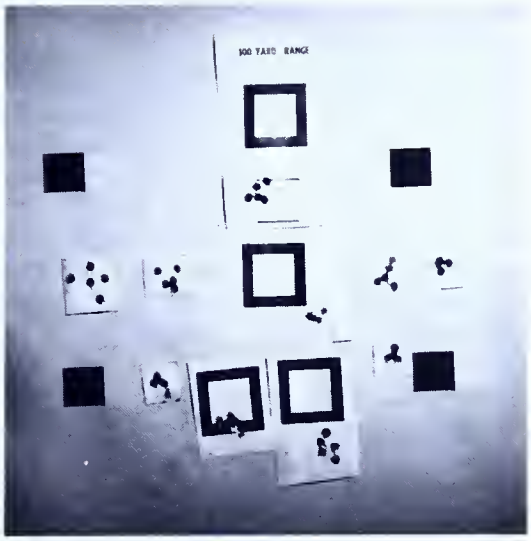
even as I spiraled upward, constantly seeking a bigger and better cartridge, I had a deep, inner feeling I was on the wrong track. I always felt chuck hunting was primarily a 224-caliber sport, but I wasn't against other calibers. Also, I was bothered by misses due to miscalculations of distance and wind. It seemed it shouldn't be this way.

The thrust of this article is to explain how I searched for the mythical rifle that would solve all my shooting requirements. For the first dozen years, I tried mainly to find my dream outfit in some exquisite cartridge. When this proved impossible, my attention swung to the physical design of the rifle. The heavy barrel was starting to dominate the varmint realm, and all the drawings I had made of regular hunting rifles were discarded in a hurry. It was back to the drawing board to come up with the perfectly designed varmint rifle. A good many evenings were spent at this pursuit.

Ideas Disappeared

Most of the ideas I came up with around 1959 disappeared, but I remember incorporating a collapsible rest that fit flush in a wide beavertail forearm and a special spring-loaded foot that came out of the toe of the stock to aid in prone shots. It, too, could be snapped back in place when not in use. My dream rifle had a thick metal sleeve around the single shot action with enough extension to accept a front target base for the long target type scopes. This would, in effect, make them "receiver mounted." I had other innovations, including a full bull barrel, a thumb-hole stock, and a super sensitive trigger a full half inch wide that could be tuned to perfection without disassembling the rifle. A tiny screwdriver was hidden in the pistol grip.

Where all the drawings have gone is still a mystery, but the dream rifle never reached fruition partially from lack of funds and partly from my unsatiable desire to hunt as much as



TEN CONSECUTIVE groups fired with M77 Ruger 220 Swift at 100 yds. White square measures one inch. All groups are under that—some far under. Such accuracy makes this a deadly varmint outfit.

possible. Like most amateur inventors, I did more dreaming than actual work.

It's strange how things can change in a hurry. First, I was up to my ears searching for the super varmint cartridges, then came the wild desire to design the perfect varmint rifle. But when I discovered one evening I was not the shot I thought I was, all these foolish things came to a sudden halt. I faced up to the fact that success was not the product of either the cartridge or the rifle, but the knowledge of how to use with real precision any good varmint or big game outfit. The answer would come from starting all over again.

My crude benchrest now meant more than just a place to sight in a rifle. In fact, it was to be my laboratory for the next several years. Long range chuck shooting stopped, and accuracy became my goal. The cartridge was no longer of utmost importance; how well I could group a load was paramount. This turnaround in thinking was the best thing ever to happen to me in the shooting line. Not only had I been wasting time on pure dreams, but I had become impregnated with the belief

that success is strictly a product of a rifle or cartridge.

If I had continued with this dead-end theory, I would probably now be shining golf clubs instead of matching wits with woodchucks, squirrels, and thundering grouse. In all honesty, it took quite a lot of intestinal fortitude to make the change, and starting over again with 125-yard chuck shots was almost more than I could accept. Still, I felt this was the proper route to take, and I was willing to take my share of lumps from hunting buddies. Accuracy was my goal, and I was determined to accomplish this.

No need to go into great detail about evenings spent at the bench-rest measuring groups and gathering load data. When the call of the hay-field tugged hard at my insides, I tried that much harder to shoot a perfect group. As I progressed, I became very interested in group shooting. I finally realized this was not just a type of therapy, but the only way for any shooter to improve. The hunter who has taken a dozen or more bucks may not agree, but I made my change after a score of shooting years and many hundreds of chucks to my credit.

Pattern Evolved

Another side benefit from all the shooting and testing was that the data collected started to make sense and a pattern evolved that showed some of my bad shooting habits. Not only that, but just getting a full, comprehensive view of what certain rifles and cartridges were capable of was worth the effort. All in all, it took the biggest part of two summers before I was convinced I knew what my varmint rifles were capable of and what I could do with them. This did take time and some extra money, but I have no regrets. Extra long distances and powerful cartridges lost a lot of appeal, and I accepted each new field shot as a challenge to what I had learned at the benchrest.

Why have I gone to such detail



HARRY MONTGOMERY'S dream rifle is a big game outfit—the M700 Remington in 300 Winchester Magnum caliber topped with Leupold scope. A great combination for any North American big game.

to explain my situation and in a sense, downgrade the special rifle or super cartridge? Well, actually, I'm not against either. It's just that many hunters are still looking for something that doesn't exist. I make no bones about it, I was taken in by pure gossip, wild theories, and maybe even a little sharp advertising. Undoubetdly, if I had been flush with money, my gun rack would have boasted a half dozen special outfits, but I have reasons to believe the past decade would not have been as enjoyable.

I have nothing against the custom outfit and still may build one or two with some of my ideas incorporated. With the custom rifle, the owner must look for other advantages instead of just field success. The special rifle can be built to exact physical requirements and with certain components desired by the individual. Naturally, to assure the utmost in accuracy, high quality material and first class workmanship are essential. Just having a custom barrel fitted to some

military action is no guarantee the rifle will shoot any better than the superb factory outfits now available.

The past decade has brought me into proximity with nearly every factory-made varmint model. Truthfully, I've fired from the benchrest hundreds of these rifles and I can't really downgrade any of them in the accuracy column. I must admit there were some that didn't suit my personal tastes, but that had nothing to do with how they performed from the bench. If I may offer a little advice to the prospective buyer of a varmint rifle, it would be to choose a heavy barrel model with an adjustable trigger. That's really how I see the varmint selection today.

As far as the cartridge goes, here again, I'll leave that to the individual. I've already stated I prefer the 224 caliber, but I've had good success with both the 6mm and the 25-06. About the only cartridge in the 7mm caliber I would suggest for varmints is the discontinued Winchester 284 which I think is still available in the Ruger M77. The 284 Winchester is truly a great cartridge which comes closer to the varmint/big game combination than any other cartridge in my book. Unfortunately, it went the way of the 257 Roberts and the 264 Winchester.

To me, the varmint rifle no longer has to reflect power and high velocity. I see it now as a personal matter. I have a Remington Model 592 5mm Magnum that will print inch groups at 100 yards. Miniature as this cartridge is, I use it almost exclusively for chuck shots up to 140 yards. That is close range shooting by today's standards, but when I crank up the Weaver V22 scope to 6X, I have only one thought in mind and that is to place the bullet exactly where I want it.

Today there are literally hundreds and even perhaps thousands of hunters and shooters who are going through the same pains I endured. Most, like myself, are looking for something special in either a cartridge or a custom made rifle. My phone calls and mail bag bring dozens of requests for advice about building the custom varminter or big game outfit. Many times, it's suggested this is the only route left for success. I am sure when I advise a conventional factory rifle or a factory heavy barrel, many are disappointed.

Along the custom line, I don't blame any hunter for wanting a Hart barrel in a hand-honed action bedded in a laminated stock. Properly done, a one-holer is almost assured in nearly any varmint caliber. However, that is not the final answer. First must come the basic training required to be successful in any sport or line of work. I went about my problem backwards, taking basic after hunting for years, but it still wasn't too late. This same approach could have beneficial results for a vast majority of hunters.

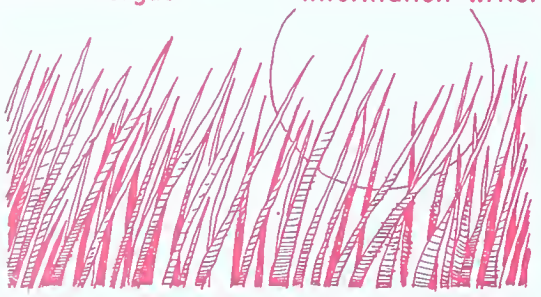
If the custom rifle is still getting top priority, at least get as much as possible for the investment. On the other hand, top results can be expected from the many fine factory products available at half the cost. The rifle will not perform to its capacity unless a top-quality scope is used. Even with all this top equipment and careful loading there will still be many pitfalls and disappointments, so keep in mind that the final evaluation of your venture will not be in the outfit itself, but in how well you can use it.

Champion Chewers

The teeth of the rodent group of animals never stop growing, but they are kept worn down by gnawing.

In the wind

chuck fergus information writer



A U.S. District Court judge recently ordered a Florida housing developer to restore a mangrove wetland which he drained without obtaining a permit. The court barred the developer from "selling, conveying, or disposing" of any property involved until restoration is complete. The developer will have to replant mangrove trees and fill in canals.

—Wildlife Management Institute

Research conducted in the Great Lakes states has determined that snowmobiles harm a number of plant and animal species. Compaction of snow by these machines may damage root systems of jack-in-the-pulpit, corn lily, hepatica and others. Snowmobile noise can cause great horned owls, which need quiet and solitude, to abandon their nests and eggs. The noise also places stress on deer, making them require more food to offset the effects.

—The North Woods Call

A 1974 nesting survey of Eastern Region National Forests reveals that the number of young bald eagles produced last year is down from a year earlier but that ospreys produced more young than in 1973. Eagle production dropped from 163 young to 119; osprey production increased from 36 to 118.

—Wildlife Management Institute

Dr. Rex Hancock, president of the Citizens Committee To Save The Cache River Basin in eastern Arkansas—the prime wintering area for mallard ducks on the Mississippi Flyway — was recently presented the first Winchester National Conservation Award. This award is presented to private citizens making extraordinary contributions to wildlife conservation on a voluntary, nonprofessional basis. Dr. Hancock is a dentist and hunter-conservationist from Stuttgart, Ark., who has spent much of his own time and money fighting an attempt by the U.S. Corps of Army Engineers to complete a stream channelization project along the Cache River and its tributary, Bayou DeView. The project would eliminate 170,000 acres of game-rich bottomlands at a cost of $54 million.

—Winchester-Western

After extensive marine research, the U.S. Environmental Protection Agency recently issued a permit allowing the city of Philadelphia to dump 150 million gallons of sewage sludge in the ocean 50 miles southeast of the mouth of the Delaware Bay. The permit requires that sludge dumping at the site be reduced 50 percent by January 1979, and 100 percent by January 1981. —U.S. Environmental Protection Agency

Virginia Game Commission personnel recently removed over 20,000 coots stricken with avian cholera from the Back Bay area of that state. Some of the birds were sprayed with tergitol, a detergent which penetrates the birds' feathers and makes flight impossible. Removal of the infected birds protects more than one million other waterfowl moving through the 40,000-acre Back Bay area during spring migration.

—Virginia Game Commission

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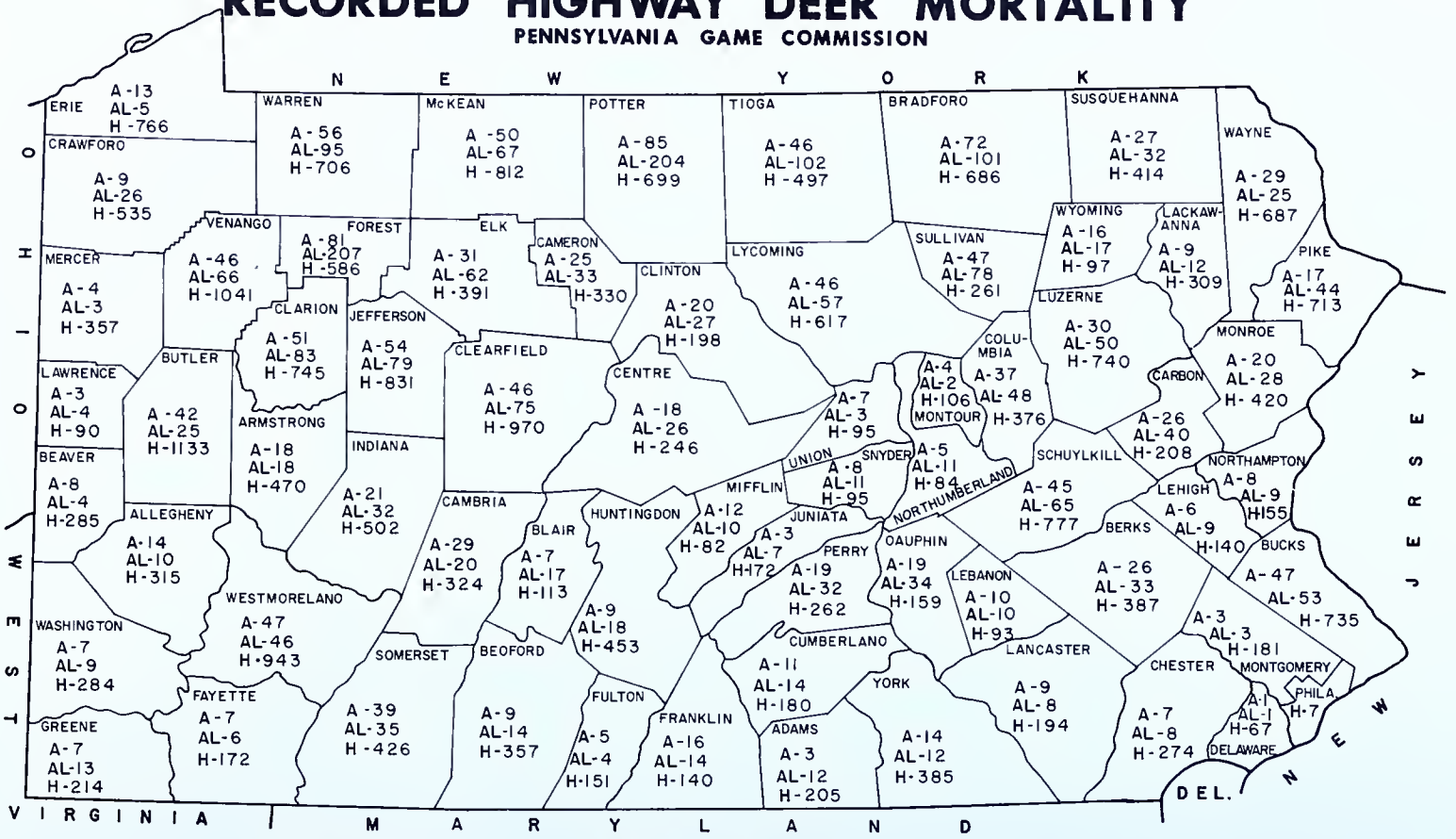
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1974
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&
RECORDED HIGHWAY DEER MORTALITY

PENNSYLVANIA GAME COMMISSION



ANTLERED DEER (SYMBOL-A)		ANTLERLESS DEER (SYMBOL-AL)	
ARCHERY SEASON	1,566		2,328
COUNTY UNKNOWN	6		9
TOTAL	1,572		2,337

Grand total ARCHERY Harvest..... 3,909

Grand total HIGHWAY Mortality.... 26,445

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COVER PAINTING BY J. M. ROEVER

Tawny, tireless, smooth-moving and shy, bobcats are efficient predators. They're largely nocturnal and are found in remote terrain in parts of Pennsylvania. Bobcats prey mainly on small rodents such as rabbits, mice, shrews, wood rats and chipmunks, and on rare occasions may even bring down deer. Though comparatively few persons actually see bobcats—including outdoor-oriented folks—spotting one is a tremendous thrill. Despite the bobcat's elusiveness, many Pennsylvanians are intrigued by this feline predator. We hope this cover and the accompanying bobcat article prove enjoyable.

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GUEST EDITORIAL . . .

Representative Steve Symms on Gun Control

"I AM ALL IN FAVOR of keeping guns out of the hands of criminals, although I must confess that I am much more concerned about the commission of a crime than I am about the method or weapon employed. Nevertheless, disarming criminals of firearms is a worthy goal. Unfortunately, it is also completely unrealistic. Those who attempt to impose strict registration requirements or outright bans on firearms as ways of keeping them away from criminals are fighting a losing battle. Common sense tells us that the reason they are classified criminals in the first place is because they are in the habit of breaking laws. There is no reason to assume that they will obey federal gun laws any more than other laws they have broken.

"The question of federal gun registration goes even beyond this argument, however. As a result of the Haynes decision by the Supreme Court in 1968, criminals would not be legally obliged to register their guns—only honest citizens would. The Court ruled that since persons who possess firearms illegally would be incriminating themselves if they came forward and registered them, they were in effect exempted from gun registration.

"The desire to ban firearms as a solution to crime is very analogous to the desire in the 1920s to ban liquor as a solution to intemperance. Gun prohibitionists and liquor prohibitionists both reach their conclusions by convoluted logic about human behavior.

"Their assumption is that human beings are victims—mere pawns of the inanimate objects around them. Remove the objects and all will be well. The Prohibition period should have taught us that this kind of reasoning is nonsense, that deviant behavior is primarily a function of human free will. And just as whiskey was readily available in the 1920s to whoever chose to break the law, so will firearms be easily obtainable through illegal channels by the crime community. The black market opportunities for organized crime would be staggering. Ultimately, any ban on firearms would have the effect of funneling huge amounts of money into the coffers of those whom the law was originally intended to control."

In regard to the emphasis being placed on gun control as opposed to the overall problem of serious crime nationwide, Rep. Symms brought these facts to attention:

"1) According to FBI reports, firearms are used in less than four percent of all serious crimes nationwide. 2) While firearms ownership has gone up steadily over the years, the rate of homicides involving guns has been declining significantly. 3) Over the past ten years, less than one-fourth of the aggravated assault cases across the nation were committed with firearms. 4) There are perhaps 200 million privately owned firearms in the U.S. today, of which only one-sixth of one percent are used in the commission of crimes annually, including less than one percent of all handguns. 5) Firearms and shooting sports are ranked 15th on the list of sports most likely to cause accidents. There are 20 times more accidental deaths with cars, 8

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The Pennsylvania Swamp Tiger is . . .

A Special Breed of Cat

By Chuck Fergus
GAME NEWS Staff Writer



Photo by Leonard Lee Rue III

THE MARCH WOODS looked like an old sepia photograph, the way they stretched drab and sere toward the rocks. Norm Erickson led as we climbed the steep hollow.

"If there are any 'cats in the area, they should have been in those rocks," he said, nodding toward gray formations that jutted out of the mountaintop. We were in northern Cameron County and we were looking for bobcat sign.

Norm is district game protector in the county, and he'd been dubious about my request. He thought the bobcat population was way down in Cameron—he hadn't seen a 'cat himself in five years—and doubted whether he could show me any evidence of these wandering, wild hunters. But bobcats are nocturnal and wary, and Norm knew they could be in an area even if you didn't see them. In the past, he'd found them

in that jumble of sandstone we were headed for.

I was sweating when we finally reached the top. Snow lay in shady crevices between the big boulders, although it had melted off the rocks and sunny slopes. The day was still and peaceful, the only sound coming from far below where a swollen creek rushed down the pristine wooded valley.

"There're some snowshoes up here, anyway," Norm said. Their light brown droppings were scattered about the table-flat tops of the rocks. Three feet above the sandstone, the big hares had nipped off alder and birch shoots when winter's snows had lain deep, letting them reach the vegetation.

I was examining the browse marks when Norm called me over. He pointed out some faded circular pawprints in the snow. It had rained hard the day before and the tracks weren't sharp, but a bobcat had definitely made them. Nearby droppings confirmed the judgement.

In the next hour we found a lot of bobcat sign—long tawny hair caught on a log above a passage into the rocks, claw marks, lots of droppings and tracks. Some of the prints in the snow were fresh, made the night before, after the rain had stopped. Norm figured the sign had been made by three or four 'cats, probably an adult female with one or two yearlings and a big solitary male. The droppings contained deer hide, so we decided to look around for a carcass the bobcats might be feeding on.

We located four dead whitetails nearby. Hair trails showed where 'cats had dragged the deer to sheltered spots under or against the rocks. The meat was red on three of the deer, indicating that the animals had died in the last three or four days. All four deer were yearlings—small, undernourished animals for which winter and nature had been too tough.

Norm and I ate lunch on one of the big rocks and gazed across the placid valley. I could see miles of rugged back-country where snow still lay deep on the winter sides of the ridges. There was no sign of man, and that made me feel good. High overhead, a hunting red-tailed hawk called its shrill *kee-er-r-r.*

"How many of those deer do you think the 'cats actually killed?" I asked.

"Probably none," Norm said. "I'd guess those deer starved to death. Did you see how gaunt they were? There's just not enough food around here to pull all the deer through winter."

"A bobcat could easily have killed those four yearlings, though," I said.

"Yep. I've read in the snow where a bobcat jumped a deer from a rock ledge or a limb over a trail. I've found where the 'cats were shaken off and also where they made kills. But bobcats do more good for the deer herd than harm. Most of the deer they kill are sick, weak or crippled. Anyway, there are a lot of deer in this part of the state and the 'cats don't affect their numbers."

Preys on Small Animals

If venison was the bobcat's main bill of fare, we might have more 'cats in Pennsylvania. But the bobcat doesn't generally prey on deer. Small animals—mice, shrews, wood rats, squirrels, chipmunks, birds, rabbits and hares—form the nucleus of the bobcat's diet. Like most predators, the bobcat is an opportunist. Porcupine, mink, muskrat, skunk, fish, frog, insect and fox remains have been found in 'cat stomachs.

Nature evolved an efficient killing machine when it came up with the bobcat. The 'cat has four large canine fangs, which pierce deep and hold prey, and behind the canines are keen cutting teeth. Five sharp, hooked, retractable claws on each front foot and four on the rear round out the armament. A favorite 'cat fighting trick is to pull its adversary down in a death embrace; the bobcat stays on the bottom, raking away with wicked rear claws at its foe's unprotected belly.



WE FOUND QUITE a few bobcat tracks, as well as other sign. Bobcats sniff out and eat carrion in wintertime, often revisiting deer carcasses several times.

Powering those claws are rangy, muscular legs. The hind legs are longer than the ones up front, giving the animal a high-tailed appearance and bobbing gait when it runs.

Some say this gait earned the critter its name, but a better explanation is that "bobcat" refers to the short, bobbed-looking tail. Other names for *Lynx rufus* are wildcat, bay lynx, red lynx and swamp tiger, a monicker used in northeast Pennsylvania where they frequent the mountaintop tamarack swamps. Even though a bobcat's tough as nails, it isn't a large animal. Adults average 36 inches in length, including a six- or seven-inch tail. Most 'cats weigh between 15 and 20 pounds, with really big individuals as heavy as 35 pounds.

Like the "Tyger" in William Blake's famous poem, the bobcat hunts the forests of the night. Pupils of bobcat eyes are slit-shaped rather than round and can open wide to admit lots of light. Two other efficient eye adaptations are abundant light-sensitive rods and a reflecting layer that makes an object stand out sharply from its background. These give the swamp tiger excellent night vision.

Most wild animals are bothered by parasites, and 'cats are no exception. John Kulish, a peerless outdoorsman and bobcat bounty hunter in New Hampshire, claimed he found fleas on every 'cat he shot—"at least two thousand of these lively boarders, whose size is matched only by their bite." In his book *Bobcats Before Breakfast,* Kulish said he swapped his car for a truck and carried his 'cats in the back.

Eight bobcat subspecies are found in the continental United States. They range from *Lynx rufus fasciatus* (a richly colored resident of the Pacific Northwest) to our own grayish-brown *Lynx rufus rufus.* Pennsylvania bobcats are marked with salt and pepper highlights, spots and dark bars, which are especially noticeable on the legs. Lips, chin, the underside of the neck and the belly are white. A furry ruff extending out and downward from the ears makes the swamp tiger's head look bigger than it really is.

But no matter which race it belongs to, a bobcat is a beautiful animal . . . and a deadly hunter.

Bobcats in search of prey move something like this:

Pad, pad, pad, noiselessly through the soft snow. Stop. Listen and listen some more, ears switching. Then on again, pad, pad, pad, pad. Stop behind a mountain laurel thicket. Crouch. Move ahead—an inch, two, three, a foot, another foot, and another. Stop. Ears cocked forward, eyes wide open and spotting the movement. Forward again, belly to snow, almost slithering. Stop. Rear legs bunched, tail twitching on the end of the statue-still form. Then bound, leap, front paws uncoiling, claws extending, clasping the shadowy hare in a plume of snow. Teeth pierce the snowshoe's skull. It has no time to cry out.

A snowshoe hare provides a night's meal for a good size bobcat. After feeding, the 'cat will likely drag its pot-belly toward those rock ledges at the head of Painter Creek, where it can den up the next day. Come night, it will be on the prowl once more.

A hunting 'cat trots to a vantage

point—a rock formation, steep hillside, low-leaning tree— and surveys its surroundings. Likely looking rock crevices, stumps, brushpiles and thickets are checked. If no mice, low-roosting birds or rabbits turn up, the bobcat hits the trail again.

Individual 'cats have a definite territory—marked with feces, urine and scrape marks—which may overlap the territories of other bobcats, especially when food is scarce. Size of the territory depends on availability of food. In some Eastern areas where food is abundant, the range may be as small as five miles in diameter. In Western states there's a lower density of prey, and bobcats range wider.

Breeding Season

Bobcats breed in late February or early March. During estrus, a male may travel 20 miles in a single night looking for a mate. After a 50-60 day gestation period, a mated female finds a cave or hollow tree insulated with dry leaves; here she bears one to four young in late April or early May. Kittens are blind and helpless at birth. Their eyes open after eight or nine days, and they're weaned within two months.

Radiotelemetry research indicates that the male leaves the female after mating, and that he plays no part in rearing young. In fact, the female guards her litter closely, as an adult male isn't above eating a kitten or two.

Fat lies on the land in late spring and early summer; inexperienced rabbits, young chipmunks, squirrels and birds abound. Young 'cats hone their hunting skills while still with their mother. They'd better learn well, 'cause even open winters are tough and the refrigerator stays bare for days on end.

Some kittens, though almost full-grown, stay with their mothers until the March mating season. Others are left to fend for themselves. Bobcats sniff out and eat carrion in wintertime, often revisiting winter-killed deer until only bones are left.

Studies in Wyoming show a high mortality rate among bobcats during their first and second winters. Each year the outer cementum layer of a bobcat's canine teeth lays down a growth ring, much like a tree does, so it's easy to age a 'cat by examining its teeth. The Wyoming project also turned up cats in the wild that had lived to the ripe old age of 14. Bobcats in captivity generally live longer than their wild cousins—one 30-pound domesticated male lived over 25 years.

The subject of domesticated bobcats brings us back to Cameron County game protector Norm Erickson. In May of 1960, a boy was hiking in the Steam Mill area when his dog routed a 'cat out of some rocks. The young man heard a mewing sound and found two bobcat kittens, little bundles of thick, well-spotted fur, their eyes not yet opened. He took the kittens home and gave them to Erickson. The game protector managed to save one, which he named Ruffy.

Norm and his wife Fran had raised all sorts of wild pets, but never a bobcat. They found Ruffy to be the most intelligent and interesting critter of all and gave him the run of the house. Fed on woodchucks, highway-killed rabbits, deer and ice cream (his

CAMERON CO. DGP Norm Erickson examines passage used by cats. Long tawny hair was found on this log, also tracks in the snow leading downhill.



favorite), Ruffy grew to be a beautiful, mature 28-pounder.

"Sometimes I took him into town in my car," Norm said, "and while I was shopping Ruff would stretch out and sleep on the deck below the rear window. There'd usually be a crowd of people around the car when I got back." One woman from Philadelphia badly wanted to buy Ruffy or any other bobcat kitten Erickson found. She said he could name his price, and that she'd send a plane to St. Marys to pick the animal up.

When he was young, the Ericksons' bobcat played rough and tumble games with Norm's sons, stalking and pouncing on the boys. As Ruffy grew older, or when he got tired of a game, he'd hiss, lay back his ears and let it be known that playtime had ended.

Although he'd never seen one in the wild, Ruffy instinctively feared rattlesnakes. He'd smell them and get fightin' mad even when Norm carried the rattlers in a burlap bag.

After playing outside or riding in the car, Ruffy had to investigate every time he came back indoors. He would walk around the entire house to see if anything was strange or different; if the place passed inspection, he'd lie down and go to sleep.

Norm feels Ruffy was tame because he'd gotten the 'cat before its eyes opened. Other people who've tried to tame bobcat kittens found them mean and intractable. John James Audubon, the famous 19th century American naturalist, attempted to raise a ten-day-old bobcat. Audubon said his charge was "a most spiteful, growling, snappish little wretch, and showed no disposition to improve its habits and manners under our kind tuition."

Swamp Tiger Experience

Tom Meehan, district game protector up in Wayne County, is another Game Commission employee who's had experience with 'cats. The last bobcat he saw was in a swamp; he spotted it last year while on night patrol. He's also had a few more intimate brushes with swamp tigers—and he says the name really fits them.

Like the time back in the '50s, when he was trying to catch a bobcat alive. Meehan was Wyoming County DGP at the time, living in the refuge house on State Game Lands 57. One day he checked his trapline and found where a bobcat had gotten caught in a trap and run off, pulling the drag. The drag had caught on a protruding hemlock root and the 'cat had broken the chain, so somewhere in the Possum Brook Swamp was a fighting-mad

PHOTO TAKEN MANY YEARS AGO shows the end of the line for an old 'cat. Bobcats haven't been legally hunted or trapped in Pennsylvania since they were named a game animal in 1970; the Game Commission has maintained a closed season on this species ever since.



swamp tiger with a No. 2 Victor trap on its front paw.

Tom called up Bill Mason of Endicott, N.Y., and by midnight they had three of Mason's hounds on the 'cat's trail. The hounds, bred in Texas to hunt mountain lions, trailed the bobcat for half an hour before barking treed. The big 'cat had climbed into the swaying top of a 60-foot hemlock. From its perch, it snarled defiance at the world of dogs and men.

Mason cut a 20-foot pole. He climbed the tree and poked the 'cat. It rocketed out of the tree in a big, arching leap, tumbled and took off with the dogs in full-throated pursuit. A hundred yards into the swamp, the bobcat—the trap still on its foot—was brought to bay on a mound of earth two feet high and four feet wide.

The dogs circled the hummock, darting in and biting at the 'cat's hindquarters. They were met by flailing claws and flashing teeth, but as the bobcat whirled to deal with one foe another would jump in. Mostly hound fur was flying. In his hunting coat Meehan carried a snake hook—a broomstick with a stout wire hook on one end—and he managed to catch the hook on the trap chain. That cut down the 'cat's mobility and the big swamp tiger didn't like it one bit.

The 'cat took a flying leap and hit Meehan squarely in the chest. His flashlight went flying and the hounds bellowed exuberantly. Bobcat, dogs and man went round and round the hummock "just like a pinwheel," Meehan recalls.

The 'cat sank its teeth into Meehan's calf; the game protector grabbed the animal around the neck and tried to pull his leg free. In the meantime "the 'cat was raking me pretty good," Tom says. When the bobcat let go of Meehan's leg, it clamped its jaws on the man's wrist. It was all great adventure for the hounds, but the four sharp canine teeth didn't feel too good to Meehan.

Finally the 'cat let loose and ran under a blown-down hemlock. Here,



NORM ERICKSON AND Ruffy. Norm feels the cat accepted humans because he'd gotten the animal before its eyes had opened. Others have tried to tame bobcats without success.

Meehan and Mason were able to get a trap on its other front paw and spread the bobcat's legs apart. They wrestled the spitting, growling bobcat into a burlap bag and trussed it up.

It's a good bet Tom Meehan won't forget his fight with that 28-pound swamp tiger, especially with all those scars to remind him. "Chasing wildcats with hounds is not one of the gentler sports," he says today.

Bobcats haven't been hunted or trapped in Pennsylvania since the Game Law was changed in 1970 to give them complete protection. For years prior to that amendment, game protectors, foresters, outdoorsmen and naturalists had been seeing fewer and fewer bobcats. Even tracks were hard to find, pointing to a declining population. Concern mounted and seasons were closed.

Hunting and trapping weren't the main reasons for the decline; bobcats can weather this direct competition. Tough as they are, however, swamp tigers can't resist man's subtler depredations. Like development of once-remote land. More and more houses.

Woods roads that open previously untouched areas to four-wheel-drives, ATVs, trailbikes and snowmobiles. These, and habitat change throughout Pennsylvania's bobcat range, threaten the 'cats today.

Earlier in this century, much of our state was brushy, second-growth forest that provided great habitat—food and cover—for grouse, rabbits, hares and small rodents. This booming animal food supply and lots of uninhabited land allowed the bobcat to prosper. But when habitat changed—when saplings and sprouts grew into mature timber, when brush, thick laurel and blackberry tangles were replaced by a bare forest floor—the amount of prey available to bobcats dropped. So the 'cat population fell, too.

Clearcuts Help 'Cats

Today bobcats seem to do well in remote areas near clearcuts. Studies have shown that the number of small mammals increases following clearcutting (due to better food and cover conditions), and there's every reason to believe that 'cats respond to this increased prey supply. The oak leaf roller, an insect pest, also indirectly increases small mammal populations by killing timber, opening up the forest canopy and stimulating sprout growth. Both these tree-moving agents—clearcutting and oak leaf roller—may help bring bobcat numbers up in the future.

Lots of folks wonder how many bobcats we have in Pennsylvania today. It's impossible to come up with an exact number, because *Lynx rufus* is as elusive, nocturnal and seldom-seen as *Homo sapiens* is the opposite.

The late Paul Failor, predator control expert and author of the Game Commission's "Trapping" book, estimated there were only 100 bobcats in Pennsylvania as recently as 1970. However, a survey of game protectors taken this past March indicates that over 100 'cats live on State Game Lands or travel across them (this doesn't account for duplicate sightings—the same animal seen twice or by different field men). More bobcats undoubtedly live in wild sections of State Forest and private land.

Population estimates range from a total of 200 to 600 bobcats in the entire state, but no scientific census work has yet been done. Maybe there's a ray of hope: because they're so wary, bobcats may be more plentiful than we think.

The species' general range is easier to determine than its population. Imagine a band across Pennsylvania from the southwest through the north-central and into the northeast roughly following the Appalachian Mountains; bobcats inhabit pockets of wild territory within this band. Some also live in remote parts of northwestern and southcentral Pennsylvania. Southeastern Pennsylvania doesn't support bobcats, though on rare occasions one wanders into this region.

Bobcats, like black bears, need isolated wooded areas away from people—the wilder the terrain, the better. With the exception of the extreme southwest, which has 'cats but few bruins, the bobcat's range is similar to the bear's.

Recently I heard a statement I consider disturbing: man is so efficient a predator that we don't need anything else. I can't agree. A world without predators would be a world of rats, starlings and pigeons, with man reigning impotently supreme. A world without predators would be incomplete and would lack a special spark of life.

Fortunately, many predators have shown an amazing ability to co-exist with man and thrive despite human pressures. Others seem less adaptable, and their numbers are dwindling.

We're watching to see how the bobcat fares. There's every reason to believe this species can prosper if it's given the remote territory it needs; if necessary, the Game Commission will manage land to help. The Pennsylvania swamp tiger is an important link to our wild past. It's truly a special breed of cat.

At the Beaver Pond

By Al Shimmel

THE MIRROR of the pond was broken by concentric rings whenever a trout rose to a hatching caddis fly. Cedar waxwings perched on the branches of a water-killed maple, launching into the air to take insects that escaped the rising trout. Occasionally they added variety to their menu with berries from a shad bush that grew on higher ground. They socialized by passing the fruit to a neighboring bird. A doe left her spotted twins hidden at the timber's edge and came down to drink. Bicolored tree swallows competed with the trout and waxwings for their share of the insects.

The caddis fly rise ceased when a beaver, towing an aspen branch, emerged from a canal and swam toward the lodge that stood some distance from the dam. As the beaver pulled the branch, still green with leaves, up the side of the lodge, the whimpering of hungry young carried plainly across the water. The beaver dropped the unfinished meal and slid underwater with barely a ripple. The crying of the young was stilled.

Outwardly there was little to indicate the stirring of the multitudinous life that formed a cosmos centered on and in the water. The impression of tranquility and peace was a hypocritical mask that hid a struggle for life. Constant vigilance was the price of even a short span of existence. Few creatures died of old age. Unalterable tides swung back and forth in a rhythm that moved toward infinity.

The pond had its beginnings when a pair of two-year-old beavers met. Both driven from established colonies, they moved down the valley, away from the swamp that filled the basin of the high plateau. A wide flat marking the confluence of a small stream with the larger waters of the Moos-Hanne caught their fancy. Just below the flat, high banks confined the stream. Here the beavers dug a bank den and placed the first aspen chunks and alder brush that slowed the water and laid the base for the dam. By the following spring when the first litter of kits arrived, the beavers had abandoned the bank den and built a fine lodge, safely protected by a moat of water. The borders of the pond were gradually reaching toward the spring that fed the tributary brook.



CEDAR WAXWINGS perched on the branches of a water-killed maple. Occasionally they fed on berries from a shad bush that grew on higher ground.

As the surface of the pond reflected more and more of the sky, the water became a magnet that drew and held a variety of life. Wind brought cattail seeds from the swamps above. There was a warm, shallow cove where they sprouted and took possession. By the third summer they had


—DOUG PIPER

not only filled the cove but also had spread their stately ranks along most of the southern margin of the pond. Blackbirds and marsh wrens found a haven among the green tangles and swung their cradles from the supporting stalks.

Muskrats moved into the cattail cove and built their dome-shaped huts of cut leaves and starchy roots. Here they established a nursery for their young and laid up stores against the winter to come. A mink began to include the pond as a part of its hunting territory and at times was able to catch either a young muskrat or a careless adult, keeping the population within bounds of the food supply.

As the sun touched the water there was a breath of time when the only sound that broke the stillness was the "or-lee" of a male red-winged blackbird balancing on top of the tallest cattail. A fluff of golden pollen, shaken loose by the bird, dusted the water below. The blackbird was so intent on impressing a drab female that he failed to see the gray missile that streaked from the crown of an oak and struck from above and behind. The extended talons locked, and the Cooper's hawk darted back into the shadows of the timber. A single red feather from the blackbird's shoulder epaulet drifted down to float with the golden pollen grains.

As if a spell had been cast over the pond, the swallows and waxwings vanished and the incessant chattering of the marsh wrens was stilled. A half hour passed before life began to return to a normal routine. Wrens and blackbirds resumed their noisy communications, but the waxwings would not return until sunset when mayflies, caddis and white millers came again to the water.

A small school of dace moved into the warming shallows. Their bright colors blended into a camouflage that made them barely visible against the floor of the pond. For a while they rose to take the floating pollen of the cattail from the surface, and then they turned their attention to the litter below. They found a colony of blood-red midge larvae that had built slime tubes which they trundled about the diatom-rich ooze. When one of the tubes broke the larvae lashed convulsively, propelling itself through the water in search of another sanctuary. So abundant were the blood worms that the dace pursued and ate them with gluttony, forgetting to be cautious.

A giant water bug lurking unobserved seized one of the smaller dace and thrust its beak deep into the flesh of the little fish. As its life juices were sucked away, the dace struggled convulsively but in vain. The school fled along the edge of the tangle. One ventured into open water and paused for a minute to orient its position. That moment sealed its fate.

Hovering Kingfisher

A kingfisher hovered above the fish and then plunged beneath the water. She came to the surface with the dace quivering in her beak. She flew to the waxwing's perch, whacked the dace twice against a branch and then flew to her nesting tunnel below the dam. Hungry young awaited her coming.

The dace fled from the shallows toward the comparative safety of deeper water. A trout, lying in the shadow of a sunken beaver log where seepage from an under channel cooled the water, scooped up two of the school before the others fled back toward the shallows.

A green frog watched until they were near and then gobbled the largest while the others plunged to safety in the maze of roots or burrowed among the loose debris of the bottom. The frog blinked and then surfaced. Her eyes watched a dragonfly nymph make its slow climb up a nearby stem. Two inches above the water it set its hooked claws into the tender plant fibers and awaited while the transformation began. The skin split along the dorsal line and the adult emerged,



THE MOTHER WEASEL attacked the black rat snake, fastening her teeth into the snake's body just inches above the vent. The snake could not turn on its tormentor.

dragging its still soft tissues from the drying nymph shuck. It clung motionlessly while the wings expanded and the body tissues began to set. It was at a critical moment of absolute helplessness. The frog came within range and all that remained was the nymph shuck drying in the sun. Other nymphs made the safe transformation and were soon flying in the sun and hunting for mosquitoes. The frog sprawled at the surface and watched them closely.

With predatory instincts sharpened down a bloodline that dated back to the Pleistocene Age, a huge snapping turtle crouching on the bottom became aware of a disturbance that could mean food. Slow step by slow step she advanced toward the cattails. Not a ripple or a change of water pressure warned the frog. When directly under the amphibian, the turtle's head shot forward with lightning speed and the sharp-hooked jaws closed on the pelvic girdle directly in front of the frog's hind legs. A convulsive splash marked the end. Yet the life of the frog went on in the tadpoles spawned from the victim's eggs that pastured on the ooze of the bottom.

It was less than a week since the turtle left the water and climbed to a sunny bank. Alternately scooping with one hind leg and then the other, she dug a hole as deep as her feet could reaeh and deposited twenty tough-shelled eggs. When her work was done, she covered the eggs and left them to the warmth of the strengthening sun. Her part in the ritual of spring was complete.

Two evenings later a skunk, prowling the margin of the pond, sniffed out the nest. It dug greedily until it uncovered the eggs. One by one it bit through the leathery shells and ate the contents. Its head was buried deep within the nest when a great horned owl floated on velvety wings across the pond. The skunk's twin white stripes were a perfect target, and the owl's talons drove deep into the little animal's vitals. The phosphorescent haze of the skunk's chemical defensc filled thc air and enveloped the owl, but it did not relinquish its hold. It struggled to become airborne. In the scuffle some dirt fell into the excavation and covered the three remaining eggs. The odor of the skunk turned a hunting weasel from a course that would surely have taken it to the eggs. Toward morning a thundershower washed more loose dirt into the excavation. The three eggs lay unmolested until hatching time.

In the economy of nature nothing is wasted. The nestling owls welcomed the mother with outlandish screams and then fought over the remains of the smelly prey. When the feast was done only fragments remained, but the strength the owlets received from

the food was transferred to their wings and allowed them to make short awkward flights from the nest.

Beside the spring brook, an ancient maple long past its prime lifted a leafless crown above the lesser trees. Below the dead branches sap still flowed into a whorl of living branches, thick with leaves. It would have taken a woodsman's eye to find the entrance to the wood duck's nest. A limb had broken close to the trunk and the tree had sought to heal its wound by rolling layers of new wood around the cavity. Years ago, a pileated woodpecker had chiseled out the inner wood to make a nest and let the fungus of decay begin its work. This was the third season that the wood duck had used this safe retreat. The entrance was snug and the decaying wood was soft. On this foundation the down-lined nest was built and the eggs were laid and brooded. When spring called the wood duck north, she found her multi-colored mate waiting. They flashed about the pond and found the ecstasy of spring. Today, within the maple's dark retreat, the ducklings pipped the shell.

The sun had barely touched the naked crown when the hole below the greening branches shadowed and a pair of bright eyes surveyed the surroundings. The female wood duck emerged and dropped to a tiny cove at the edge of the brook. She called softly. A downy duckling appeared at the opening and hesitated because of the height. Again the mother murmured softly and another duckling appeared, jostling the first. It tumbled down, its fall broken by the leaves. The second flung into the air before the first had reached the ground. They hit the spongy earth and bounced, righting themselves unhurt. The mother voiced her reassurance, collected her brood and led them to the water.

Ten ducklings followed the watchful female down the brook until they found the wider waters backed up by the beaver pond. They fanned out, nibbling at the floating algae. Soon they discovered water snails and caddis larvae that lived in cases cut from elodea leaves and eel grass. At last they tired from their first adventure. The mother led them out to rest where the sun had warmed a sandy bank.

The hunting mink crept through the borderinig sedges and froze. One of the young, more active than the rest, awoke and looked around. A carpenter ant toiled across the sand carrying a small green worm. The duckling moved to investigate and passed too near the sedge. With a peep of terror it was gone. The ant continued its journey toward a decaying stump.

Brood Restless

Several of the ducklings peeped inquiringly. Disturbed by the restlessness of her brood, the mother led them back to the water. She cruised the edge of the cattails, unaware that under the water a sinister shadow followed their progress. Its head surfaced with hardly a ripple and watched through star-pupiled eyes. When the ducks loitered to feed, the snapper glided under the brood and when they turned away she pulled a laggard under the surface. The duckling was but a small mouthful and she took up the stalk again. She rose swiftly and seized another by the dangling foot. It flapped its wings frantically and peeped with terror before it, too, was pulled below.

The mother fled with her brood toward deeper water. When they came to the breast of the dam they scrambled through the logs and sticks, then over the barrier to the stream below. Here they bobbed like corks as the current carried them downstream. Soon they found a quiet place and began feeding again. Here the water was bright and clear, and hunting turtles were absent.

Near the beaver pond's edge, a weasel had built a furlined nest under a heavy stone. Her four young de-

manded that the mother hunt constantly to supply their growing appetites. Tiny runways among the lush grasses at the edge of the pond often led young meadow mice to adventure from the nests where they were born. The weasel patrolled these runways, finding prey in abundance. She hunted with an urgency, carrying her kill to the nest to feed her growing young.

A black rat snake traced with its forked tongue the faint scent left by the female weasel and found the entrance to the den under the stone. It entered the narrow passageway and seized the nearest young by the head and began to swallow it. At that moment the mother weasel returned. Finding the entrance partially blocked by the body of the snake, she dropped the mouse she was carrying and attacked. Because of the narrowness of the tunnel she could not pass the snake but fastened her teeth into the body just inches above the vent. The snake writhed with pain but could not turn on its tormentor. It dropped its meal and fled through the hole to the other exit. Once it gained the open it moved rapidly through a tangle of low bushes until the weasel lost its hold.

Concern for her offspring caused the female weasel to return to the nest. The three remaining young cowered under the nest; the other young weasel had been so badly mauled by the snake that it was dead. Without delay the mother picked up one of the remaining young by the nape of its neck and carried it to the entrance. Already in her mind was a temporary den at the base of a hollow tree. It was fairly far away, but for the most part she could follow an old logging road that skirted the edge of the pond.

A hen grouse had nested along the logging road at the foot of a stump shadowed by a hemlock. Her brooding had rewarded her with eleven downy chicks. Their down dried quickly, and with this transformation came restlessness and agility. She herded the chicks away from the empty nest, and for the first two days kept them close. They learned to hide at her warning and come at her call. In spite of their caution, the weasel had caught two of the brood.

When the grouse were four days old, their mother led them toward the pond. The base of a decaying pine stump exposed to the afternoon sun made a perfect dusting place. Here the mother sprawled with fluffed feathers, while the chicks preened their sprouting pin feathers and enjoyed the sun.

It was fate that the weasel, carrying her young, emerged from the ferns a few yards from the grouse and her brood. Maternal instinct changed the mother grouse into a fury. With a warning to her chicks she charged an enemy from which she would have normally fled. She struck with wings, beak and feet in such a whirlwind of hate that the weasel was toppled, bruised and battered. The weasel escaped into the bushes, leaving her young dying beside the trail.

Evening came and with it the waxwings launched from the dead maple to capture fluttering insects. The setting sun shone crimson on the water.

Two young people, walking hand in hand, wandered down the forest road from their campsite. A male wood duck flashed by, his harlequin colors catching the fading light. The beaver surfaced and swam toward the canal that led to the aspen grove. A trout leaped, changing the perfect images of the trees into grotesque fantasy. A deer came down to drink, her rusty coat contrasting sharply with the forest shadows. The light faded, but still the couple lingered, listening to the vesper notes of the hermit thrush ringing across the water. It was with reluctance that they finally turned away. The girl voiced their appreciation:

"It's so peaceful."

A Dog Stretched on Point, Nostrils Quivering,
A Hunter with Gun Half Raised,
A Roar of Wings, a Waving Branch of Evergreen,
Snow Sifting In a Soft Curtain Toward the Ground . . .

And Fan-Tails in the Grapevines

By Roger Latham

I AM ONE OF those individuals who appreciates any and every opportunity to do something special out of doors. This is when I am most content and life seems fullest.

And I am not particularly a specialist. True, I have a tendency to prefer casting the fly to all other kinds of fishing; and the trout may be my favorite fish. But I don't discount the smallmouth bass, the muskellunge and other kinds of fish—not by any means.

It's the same way with hunting. My favorite kind is bird shooting over a good dog, and I like grouse and woodcock hunting best. But, again, I thoroughly enjoy gunning for waterfowl and pheasant, am wonderfully stimulated by the wild turkey and delightfully challenged by deer hunting. I find nothing wrong with rabbits, squirrels and other "lesser" game, either.

My interests extend well beyond these two forms of outdoor activity. I go camping, bird-watching, hiking, mushroom hunting, canoeing, etc., etc., and enjoy each immensely.

But at a certain time of year, just after the leaves have fallen and the forests are carrying that wonderful smell of damp leaves, I suddenly realize that among the most gratifying privileges on earth is a day in the grouse woods.

So, I can say in all sincerity that anytime, anywhere, I get to go grouse hunting, it automatically becomes a day when the Red Gods smile for me!

During 45 or more years of grouse hunting in several different states and Canada, I have had a lot of these red-letter days. But one that took place four or five years ago stands out especially clearly in my mind.



LATHAM EXAMINES GROUSE which Lab retrieved. Author's favorite sport is hunting birds over a good dog—and he likes hunting the fan-tails best.

It was the second Saturday of the grouse season as I recall. Three men and three dogs hunted their way down the little draw as it tapered out into old abandoned farm fields. The men knew there should be a grouse or two in the scattered grapevines and gray dogwood patches ahead. Two birds had flushed wild moments



A BRACE OF GROUSE—pleasing to the eye and, later, to the palate. The hunter will not bag his limit of grouse every day, but sometimes skill and luck prevail.

before and flown in this direction. The two Brittany spaniels and the black Labrador quartered busily in front of the hunters, each maintaining a close working relationship with his master.

Suddenly, there was motion beyond and above the dogs as a grouse flushed out of an oak still carrying dead leaves. The bird quartered back and away. The little 410 double came to my shoulder, the muzzle moved well past the speeding bird and the shot charge was on its way.

The bird crumpled and struck the ground with a soft thud. Seconds later, the spaniel dropped a grouse at my feet. I smoothed its feathers and admired it for a moment before sliding it into my game bag.

Perhaps an hour later, in a different covert, a grapevine tangle produced a second bird, very close and very easy as grouse shooting goes, and my hunting day was finished.

I put the second bird in my game pocket and continued to keep pace with my two companions. One still had a bird to go to fill out his limit.

As we circled back in the direction of the car, my mind began to dwell upon the delights of hunting this great game bird—a bird unrivaled for its challenge to the shooter. It's easy to do this when you are in the proper setting. As I walked now, I no longer felt the need to stay on the alert, to carry my gun at "ready," and to keep my senses sharply attuned to every movement and every sound. I was relaxed and my thoughts could wander to a contemplation of the delights and skills connected with this sport. True, I still went through the motions of hunting. But essentially I was analyzing and admiring the forest cover, thinking about why this particular woodland produced grouse for recreation, and what a great privilege it is for Pennsylvania sportsmen to have this bird to hunt.

I watched with smug delight as a grouse flushed and quartered back right past the other companion with his daily limit. I watched him shoulder his shotgun and follow the flight. And then I listened as he expressed his tongue-in-cheek conviction that the bird wouldn't have had a chance!

I watched another bird flip off the very top of a tall tree and rocket clear over the crest of the ridge ahead of us and thought how difficult it would be to overshoot these birds most places.

I almost had to defend myself as another roared out of a grapevine tangle and flew right at my head. What a great opportunity to recognize once again the beauty, the speed and the agility of a grouse on the wing!

Below me I heard the same companion observe that grouse never look so big and slow except when the hunter already had two in his coat.

And this seems to be true. Until you have reached that magic number, every grouse appears to have the mental faculties of an Einstein and the flying abilities of—well, a grouse.

They flush from the total protection of hemlocks and greenbrier; they stay low when the brush screens your view; they fly from behind when you expect them to be out in front; or they whip behind a big tree just as you squeeze the trigger.

They roar up from under your feet; dive like an arrow out of the tallest hemlock around; and lift off the bare forest floor just five yards out of shotgun range.

They play havoc with your adrenalin supply; shatter your normally steady nerves; destroy your self-confidence and make a monkey out of you before your unsympathetic companions. Even grouse dogs learn subtle ways of expressing themselves after their masters have missed six in a row! It's this wildness, this wisdom and this unpredictability which make the bird so difficult to bag and so easy to admire. And that's what makes grouse hunting the very special sport it is.

Of course, one has to qualify that statement; not every day is as great as every other day, nor is grouse hunting always something special.

For instance, there are days when I question my own sanity—when snow may be knee deep, when every bush is laden with a wet blanket of that cold, white stuff, or when driving sleet slashes my face as I hunt.

My wife regularly questions my sanity, even on days when only a light drizzle is falling; when roads are only a little snow-covered and icy; and when the temperature is only slightly below zero.

Brittany Dubious

Strangely, my Brittany shares some of her views. On rare occasions, he has looked out of his warm kennel quarters as I opened the door, squinted into the high winds and swirling snow and appeared to say: "You can't be serious!"

But, like me, he will go anyway, even though our better judgments say "no."

But, fortunately, grouse hunting comes in that glorious time of the year, too, when one day after another may be sunny and calm and the temperature ideal for that long walk in the woods.

This is one thing that non-grouse-hunters don't really understand. One does not really hunt grouse in the woods, at least not in the kind of

I ALMOST HAD TO defend myself as the grouse rocketed out of a grapevine tangle. These birds have the uncanny ability to use every particle of brush for concealment and protection.





GROUSE HUNTING IS aspen laden with the gold of October; it is the smell of gunpowder in the fresh air; and occasionally it is a picture-perfect retrieve by a fine hunting dog.

woods most people visualize as a woods. No, indeed! Grouse avoid the forest of beautiful big trees where hunting this bird would be a comparative delight. Instead, they live in the thickest, meanest and most trying "jungle" they can find—thorns, briars, tangles and slashings. In this awesome security they plan their strategy, just in case some courageous hunter should invade their stronghold.

Part of the skills necessary to become a successful and accomplished grouse hunter involve a knowledge of the bird and its habitat. How few hunters really know the object of their endeavors. And how few really know how to recognize good grouse habitat.

Yet, this is so imperative in terms of miles walked and opportunities realized. The real grouse hunter rates success on his flush-count, not necessarily on the number of birds bagged. Ask him what kind of a day he had afield and he might say: "Great, we had 28 flushes."

This means that on 28 different occasions, the group saw or heard a grouse flush from the ground or perhaps from a tree. But, as any experienced grouse hunter knows, 28 flushes certainly does not mean 28 shots. Sometimes it could mean as few as a half dozen opportunities, and not all of those might be rated as good opportunities.

That, of course, is why grouse shooting is such a challenge. You may hear the roar of wings as a bird takes off but never see it at all. Or you might catch just a fleeting glimpse as it crosses a small opening in the brush or evergreens ahead. At other times, it can spring up almost at your feet and be gone in a split second behind an impenetrable grape tangle.

Believe me, the grouse hunter usually earns every bird he gets, not only by hard work, and often physical discomfort, but also through his shooting. Only the best of wing-shooters are consistent on this dodging speedster of the brush forests.

But as grouse hunters say over and

over again—that's why he is such a prize and such a delight to hunt. If the grouse were an easy target, its true value as a game bird would be lost. The challenge is the important thing.

That evening after my dog was fed and I was cleaning the little double, I began to reflect upon the grouse and its value to those men who find contentment in its pursuit. The longer I mused, the more I was convinced that this grand game bird, and its counterparts, serve modern man in a remarkable way.

He no longer needs wild birds for meat as his ancestors once did, although heaven knows the grouse is one of the tastiest of wild game, but he does need other things which the bird generates indirectly. In this case, the grouse serves as the stimulus for much needed physical exercise and healthful mental relaxation. Hunting game serves to stimulate human senses and reflexes which go unchallenged and quickly stale in the humdrum existence of the twentieth-century business world.

The grouse hunter learns the meaning of alertness, the necessity for responsive reflexes and muscular coordination and the value of perseverance. He can become as finely trained and as skilled as a super athlete, with all the same rewards and satisfactions of playing the game well.

But, unlike the athlete, the grouse hunter does not always play to win. At times, he plays the game without really trying hard to score, content to add to his record another day. His delight is in the playing—the walking, the handling of the dog, the thrill of the flush and the whole business of just being there.

As I was placing the little 410 in the gun cabinet, I kept contemplating



these things in my mind. What more could one say as a tribute to the bird which means so much to so many? dedicated hunters?

Then it came to me: Grouse hunting is a dog stretched on point, muzzle high, nostrils quivering. Grouse hunting is a hunter with gun half raised, heart thumping, eyes glued to the spot just ahead of his dog's nose. Grouse hunting is a roar of wings, a waving branch of evergreen, snow sifting in a soft curtain toward the ground.

Grouse hunting is aspen laden with the gold of October; white birches blending with the green of hemlocks, or black alders where woodcock share their haunts with their fan-tailed counterparts. Grouse hunting is the smell of gunpowder, the chatter of a red squirrel and the scolding call of the jay.

Grouse hunting is fresh air, strong legs and an appetite of a bear.

For all this we salute you, bird of thunder. We salute you for providing the incentive, and the excuse, for hundreds of glorious hours afield and for permitting us to breathe deeply of the damp, leaf-scented fall air which rightfully belongs to you.

May every spring from now until eternity throb with the drum roll of your wings!

Old Monkey Face

A name under which the barn owl is illegally sold in some pet shops is the monkey-faced owl. Federal law forbids keeping these winged predators in captivity.

Turning On to Backyard Wildlife

By George H. Harrison



IDEA OF ATTRACTING wildlife to the backyard isn't new; for generations people have been feeding animals and birds like this downy woodpecker at feeding stations.

PENNSYLVANIA has always been an outdoor-conscious state, but something new is happening in many of the backyards of the Commonwealth. The newest step toward getting back to nature, it is called a backyard wildlife habitat.

People who love getting out to hunt and fish as well as camp and hike have found a new way to bring the woodlands to their own backyard so they can enjoy wildlife the year around. Based on research from the Environmental Forestry Unit at Amherst, Mass., first published two years ago by the National Wildlife Federation, people all over America are planning and planting their backyards to attract wildlife the year around.

All wildlife has the same basic needs: food, cover, reproductive areas and water.

By planting the right trees, shrubs and flowers, plus building some additional hiding places, the first three basic wildlife needs can be met. Add a simple water area and the formula for a successful backyard wildlife habitat is at hand.

The idea of attracting wildlife to the backyard is not new; only the Amherst method is new. For generations people have been feeding wildlife artificially through the maintenance of feeding stations and bird baths. I've eaten breakfast with cardinals, chickadees, titmice and juncos more mornings than not through my 38 years of life. The breakfast room window in our Tarentum, Pa., home where I grew up had a regular clientele of freeloaders all winter long. We converted the summertime flower box to a wintertime bird feeding tray and it attracted birds from miles around.

In the summer, we had a great variety of nesting robins, cottontail rabbits, toads, garter snakes, cicadas and many kinds of butterflies . . . all this in the heart of a very heavily industrialized community along the Allegheny River.

It's hard to evaluate the impact that backyard wildlife area had on my career as a wildlife journalist, but there is no doubt that it helped shape my philosophy on the human environ-

ment and its relationship to the natural world.

People can get involved with nature in many ways, but I don't know of a better way than to create your own backyard wildlife area. Using the Amherst method, it is easy to do, need not be expensive, and is a project the whole family can get involved in and ultimately benefit from.

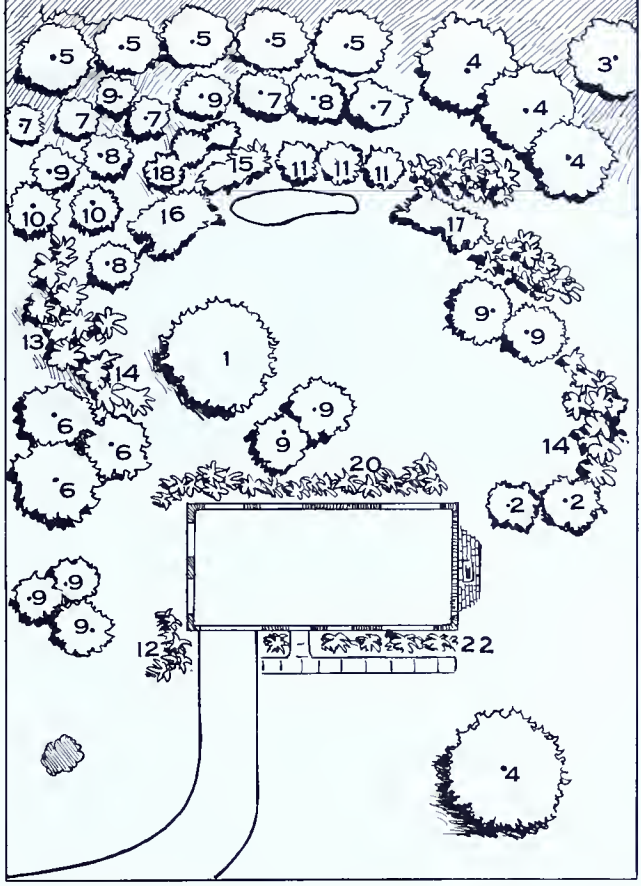
Consider the experience of Fred and Carol Mebus, of Easton. A few years ago when they bought their 100-year-old farmhouse, they were living in the boondocks. But when the farmer began breaking up the land next to them into parcels for a housing development, the Mebuses could see their natural environment evaporating. They bought an additional three acres of land to create a buffer zone between them and the new houses. By planting as well as letting nature take over other parts of their four-acre tract, they created a model wildlife habitat.

Deer are common now on the Mebus property. They graze in the new lot, paying no attention to the children playing ball nearby. Opossums and skunks make nightly visits to the Mebus back porch for table scraps.

Interest to Children

Mrs. Mebus's fifth-grade class benefited, too. Her daily reports to them on the latest happenings and the additions to a growing bird list were of great interest. She told about the broods of pheasants and litters of cottontails that grew up in her backyard. It's hard to determine the good effects these experiences had on the children who heard them.

At the other end of the state, in Pittsburgh, Mrs. David Roush provides habitat for bobwhite quail, pheasants, mourning doves, hummingbirds, woodpeckers, thrushes, warblers, and many others. In the spring the azalias, which serve as cover for the birds, are breathtaking. The Roush habitat was a joint man-and-wife project until Mr. Roush passed away at Thanksgiving 1973. Now the backyard is maintained by Mrs. Roush, with the help of her daughter and grandchildren, as a living memorial to Mr. Roush.



BACKYARD WILDLIFE habitat planting plan: LARGE TREES—(1) beech; (2) holly; (3) white oak; (4) red maple; (5) white pine; (6) white spruce; (7) hemlock. SMALL TREES—(8) mountain ash; (9) flowering dogwood; (10) crabapple. LARGE SHRUBS—(11) winterberry; (12) downy serviceberry; (13) autumn olive; (14) viburnum; (15) elderberry. SMALL SHRUBS —(16) blackberry; (17) silky dogwood; (18) red osier dogwood; (19) Tartarian honeysuckle; (20) snowberry; (21) Japanese barberry; (22) rhododendron or other ornamental suitable to site. FLOWERS for planters and scattered beds — asters, daisies, marigolds, petunias, black-eyed Susans, sunflowers.

In Lititz, nationally-known agricultural photographer Grant Heilman maintains two small circulating ponds, to the delight of the pheasants, doves and songbirds which flock into the moving water every day. The ponds even have a viable population of frogs and fish.



BACKYARD WATER AREA attracts birds and enhances the beauty—and even the resale value—of your property. Such installations may be expensive, however.

Why Build a Wildlife Habitat?

Beyond the esthetic values of attracting birds and animals to your backyard, there are other, more practical, reasons for going to all the trouble of developing a backyard wildlife area. Real estate people tell me that the development of a wildlife area can increase property value 3 to 10 percent. Even if you do not plan to sell the property, the trees, shrubs and flowers certainly enhance the beauty of your surroundings manyfold. If that is not enough, one of the best reasons for doing all this is that it is just good fun.

In Pennsylvania, city and suburban residents can expect common winter residents such as cardinals, juncos, chickadees, white-throated sparrows, tufted titmice and bluejays, as well as nuisance birds such as English sparrows, starlings and pigeons. Winter mammals, except gray and fox squirrels, are a little scarce unless you are out of the city far enough to have deer.

Summer residents to Pennsylvania yards are numerous and easy to attract. They generally include nesting cardinals, song sparrows, house wrens, Baltimore orioles, chipping sparrows, robins, and purple martins (if you are lucky). Some southern Pennsylvania residents are now getting mockingbirds. Summer mammals include cottontail rabbits, raccoons, opossums, gray and red squirrels and, at night, flying squirrels, and white-footed mice and deer in outlying areas.

Summer means a great array of butterflies, katydids and bees. It means garden toads and perhaps a box turtle and a garter or green snake if you like these creatures.

All of these animals can and will use your yard if you provide for them the four basic elements: food, cover, reproductive areas and water.

Make a Plan

First you need a plan. No matter how crude, you need to sketch out the borders of your yard, what is in it now, and what you plan to plant and build in the future. Even if nothing but grass is planted there now, you can design a model wildlife area on paper. This simple sketch could determine the whole course of your backyard wildlife program.

Where Do You Get Help?

Two years ago, "National Wildlife Magazine" ran a 12-page feature entitled "Invite Wildlife to Your Backyard." It was so popular that the National Wildlife Federation launched a program which certified hundreds of backyards across the U.S. as official wildlife sanctuaries. Many are in Pennsylvania. Reprints of this article are available upon request from the National Wildlife Federation, 1412 Sixteenth Street N.W., Washington, D.C. 20036.

More recently, the National Wildlife Federation published a book on the subject entitled *Gardening With Wildlife*. It, too, can be obtained at the above address.

Another good source of information is from your county agent or any college or university landscape specialists. If you live in a soil conservation district, you can get help on water and soil problems from that office. Even the big city zoos and museums

may be helpful in the way of specific needs for your wildlife area.

Finally, your local nurseryman or lawn and garden center man is one of the best sources of information on what and when to plant. If you have some money to spend on this project, you will want to go to the local nursery for your plant materials anyway.

Cost

And, speaking of money, how much will this cost? The answer to that is: it's up to you. If you have a big backyard and want to hire someone to do it for you, the cost will be high, perhaps as much as $10,000. On the other hand, you can do it all for as little as $200, but that means that you make your own plans, provide your own muscle power, and go on a scavenger hunt for free plant materials at your Uncle Frank's farm (always ask permission before digging on property that is not your own).

If you can afford to hire a landscape architect and someone to plant the materials, and if you buy large, well-developed nursery trees and shrubs, the cost will be high. Investing the extra money, however, means you'll see results faster, and the plants will also have a better chance of survival.

These costs do not include maintenance. But expenditures for fertilizer, water and labor are no more for this kind of wildlife area than for a well kept lawn.

How Big a Yard?

In researching this subject, we found that an average suburban backyard in Pennsylvania is about 100 feet by 120 feet (about ¼ acre). If your yard is smaller, it may be difficult to provide all the things we are talking about here, but it is possible to provide the four basic needs (food, water, cover and breeding areas) and attract some wildlife. Even people who live in apartment houses have been successful in attracting a great variety of wildlife to window boxes.

A dentist who lived in Pine Grove Mills, Pa., attributed much of his success as a dentist to the fact that he had a very active window box outside of his office. Children, in particular, would concentrate on the birds and squirrels feeding at the window box while Dr. Hummer was working on their teeth. Before the patient knew it, his dental work was done.

A window box can support the same basic processes as any natural area—soil, water, sunlight and plants—combining to produce life in a microcosm.



FRED AND CAROL MEBUS provide wildlife with food and cover in their backyard. The location? A housing development in Easton, a small city east of Allentown.

If your apartment isn't too high above ground and there are birds and animals already in the general area, you might be able to attract a surprising variety of wildlife.

If your yard is larger than our model 100 x 120 feet, you're lucky. You can use the same basic principles to create a wildlife habitat which is vastly more effective because it can be more complete, diverse and stable.

It takes an acre or more to attract animals higher in the food chain . . . those that live on other animal life,

such as owls and hawks, raccoons, skunks and foxes. Grazers such as deer also need more acreage.

When Do You Start?

Today. Of course, the best time to plant trees and shrubs is spring or early fall. But you can make your all-important plan, clear out unproductive growth, and prepare your soil almost any time. If it's the dead of winter, there are always bird feeders, as well as bird and squirrel nesting boxes to be constructed.

Food: Some wildlife eats seeds, berries and nuts. Other kinds require insects, worms and grubs. Still others are grazers and eat grass, leaves and buds. Food can be grown naturally in a backyard by planting food-bearing trees, shrubs and plants such as oaks, crab apples, blackberries and sunflowers. Food can also be dispensed by setting out bird feeders containing cracked corn, sunflower seeds, millet, milo, wheat and other grains. Beef suet is a favorite among those birds that eat insects and grubs. Squirrels and chipmunks love corn still on the cob and peanuts in the shells.

Cover: Any place that protects wildlife from predators and weather is considered cover. This means that you can create some cover with the same trees, shrubs and flowers which provide food. You can also create rock piles, rock walls and brush piles as additional cover for rabbits, chipmunks and some songbirds.

Reproductive Areas: All wildlife needs protective places to breed and raise young. Different kinds of wildlife require different kinds of reproductive areas, but all must be hidden from sight. The same food and cover trees, shrubs and flowers also provide some reproductive areas. By allowing certain parts of the backyard to grow wild, you can provide many additional places for birds and animals to nest.

Nesting boxes are a good idea to attract wrens, bluebirds, chickadees and tree swallows. Larger boxes will satisfy owls, woodpeckers, wood ducks, sparrow hawks as well as squirrels. Robin shelters are recommended.

Water: It doesn't take an expensive recirculating waterfall and pool to satisfy wildlife's critical need for water, but the fancy ones are very attractive and quite decorative. For more economically minded people, the standard bird bath or even an upside-down garbage can lid works well. By keeping the container filled and clean, the habitat will draw more visitors. During migration periods—that is, spring and fall—a bucket filled with water that has a hole in it will bring birds in from far away. The drip, drip, drip is very compelling.

The Amherst research involved three stages of backyard growth. The basic and most important was the first stage in which a typical subdivision with nothing but grass was planted in the prescribed way. The second stage was the same yard some eight years later, and the third stage was the same yard after 40 years of growth. The important point about the three stages is that many people already have mature trees in their yard and by planting shrubs and flowers they can reach the 40-year point in a year or two.

Therefore, no matter how old or how new your yard is right now, you can convert it into a wildlife habitat and have some degree of success within the first year.

For more details as to what and where to plant the food, cover and reproductive vegetation, look at the accompanying plan.

George H. Harrison is a field editor for both "National Wildlife" and "International Wildlife" magazines. He was GAME NEWS editor for more than four years before going to "National Wildlife." Harrison is also a freelance writer interested in wildlife, the environment and man's interaction with nature.

Our Gun Editor Solves the—

Riddle of the Invisible Rabbit

By Don Lewis

Photos by Helen Lewis

A GLANCE AT the clock showed about two hours of legal hunting time—not much, but enough to match wits with one of the wary rabbits that stuck around my 100-yard range. It didn't take long to get into some hunting clothes and head for the gun rack. Five minutes later I was unsnapping Rip's chain, encouraging him to get into the pine trees above the range and bounce out a rabbit.

Things didn't work as fast as I wanted them to, but a couple of hundred yards out Rip cut loose with a wailing cry of the type that always thrills a true beagle lover. I don't know much about dogs, nor have I ever raised any, but when I bought Rip, the elderly gentleman who owned him told me the dog was born to run rabbits. I found that to be true—along with being born to run a few other four-legged creatures including foxes and a deer now and then. The deer running bit did stop after a couple of years, but foxes were a temptation Rip never overcame.

As I listened to the chase heading back over my land, I headed for one of the few open spots among the small pine trees and waited for Rip to bring the wily cottontail around. I didn't have long to wait, but when Rip passed by less than a hundred feet away I failed to see the rabbit. Fifteen minutes later, Rip came in below me near a wet weather pond, and I made the mistake of trying to get a better vantage point. My movement turned the chase in the opposite direction.

I have plenty of patience, being a chuck and squirrel hunter, and I'm willing to stand very still when the chase is coming my way. Again, Rip



RIP AND DON DISPLAY the solution to the riddle of the invisible rabbit. It was a tough problem to solve, but if anybody could do it, it would be the beagle.

headed back toward the pond, and I thought for sure the rabbit would pass through the small opening. To my chagrin, the chase came close, but again mysteriously changed directions. I was more than baffled and couldn't remember ever experiencing this in the dozen years I'd hunted here.

Time began to run out while the chase was in full bloom on the spoil piles above me. Against my better judgment I fought my way to the top, where I managed to find a spot open enough to swing my M600 SKB 20-gauge Ithaca over/under. By the

sound of things, I seemed to have made the right decision, but again the chase went below me—through the opening I had just left. It sure wasn't my day, and I was at a loss to figure how I happened to encounter such a smart rabbit.

I was no stranger to the "pine tree" rabbits, but this situation had me baffled. I knew the runs where I had tumbled a number of cottontails in the past, but I was bothered most by the way the chase repeatedly came close, but never quite close enough. I'm not a bit superstitious, but I started thinking maybe Rip was running an invisible rabbit. At quitting time, I still hadn't glimpsed the critter.

More Frustration

Two days later I had time for a late-afternoon hunt. I headed back to the little pond to try to solve the mystery. It was very dry, and I didn't expect too much from Rip. I sure was wrong in that assumption. He began yelping his head off on a fresh track along the edge of the pond. If the chase a couple days before had been frustrating, the one I endured that afternoon was almost more than I could stand.

No need to describe the number of times Rip drove his invisible quarry my way, and there's no need to tell how I finally pushed and shoved from vantage point to vantage point without ever once catching a glimpse of what was fast becoming my Nemesis. I no longer felt the need to just get a shot; my frustration had reached the point where my rabbit-hunting reputation was at stake. Worse yet, when time forced me to leave, Rip continued hunting, loudly following a trail that led him back and forth through the acres of dense pines.

Later that evening, I turned on the range lights and managed to catch Rip as he crossed the path to the targets. For a fellow in his 50s, I suppose I sounded strange as I talked at length with my long-eared beagle, assuring him I wouldn't quit until the riddle puzzling us had been solved.

The next day, I left the house earlier, determined to solve the mystery that had caused me humiliation and my dog to run miles in circles. As Rip hit the area of the pond, he broke into a frantic bark that told me game was up and running. I lost no time heading for the opening above the pond, but this time I made up my mind to stick there even if the chase lasted to quitting time.

The tiny feeder stream that kept the pond alive in wet weather was free of trees for a yard or so on both sides. This time I stood where I could watch that little alley and also the other opening. I knew if the rabbit crossed the little stream, I would have to be very fast. When the chase headed my way, I raised the little 20-gauge to a three-quarter position, my thumb tight against the safety. To my dismay, the chase took a sharp right turn and faded into the distance. My blood pressure was beginning to rise.

Minutes rolled by. Rip's voice was hard to follow as he wound in and out of the deep ravines. Once more he headed back, and again I raised the Ithaca. Could the rabbit be running several hundred yards ahead of the dog?

I felt rather foolish holding a shotgun in a ready position when the dog's voice was far in the distance, but it was lucky I made the move when I did. As I watched down the little stream for sight of the rabbit, my eye caught a flash of red off to my right. I swung the short-barreled over/under to my shoulder just as a large red fox hit the clearing. I wanted to fire the modified barrel carrying a full ounce of No. 5s, but there wasn't even time to push the selector button on the trigger. I just swung and fired. The ⅞-ounce load of 7½s blasted out of the improved cylinder barrel for an instantaneous kill. When Rip joined me minutes later he seemed as happy as I was that the riddle of the invisible rabbit had been solved.



Photo by Leonard Lee Rue III

COOTS ARE SCALLOP-FOOTED, lobe-toed, dark-gray, smallish, white-beaked, vegetarious, wacky birds that some folks would call "crazy as a loon."

Fulica, the Coot or Mudhen

(Fulica americana americana)

By Carsten Ahrens

FULICA the Coot was mated to a mudhen. From his scientific name (just above) you might come to the conclusion he's strictly an American species, and he is. To a foreigner who knows him, the reaction probably is: "And thank goodness for that!" but Fulica the coot has close relatives anywhere in the world, and all of them are equally zany.

Fulica and his mate look just alike, smallish, dark-gray ducks with big white beaks, a bunch of white feathers low astern, and a twinkling of white in the wings, noticeable only in flight. They sport green feet.

The feet can't be called ducklike, for they aren't webbed. Rather they are scalloped with a membrane that gives each toe the distinction of being lobed. This makes them fairly good swimmers and divers, and in shallow water they are as good at tipping for food (heads down - tails up) as any mallard.

Their funny feet are also ridiculously good at helping them make a splash-everybody-get-away when they are startled by a mink or a would-be Nimrod. With much noise, flapping and splashing they run flatfooted over ooze, lily pads, pickerelweeds, arrowroots and bulrushes until they reach open water where they decide the scare isn't enough after all to cause them to take flight. So they settle down and jabber about it as they work their way back to shallow water again. Of course, by this time any worthwhile quarry nearby has taken wing and is far out of range.

In swimming, coots give the impression that they're striding through the water, and at every step, like pigeons, the head and neck are in aggressive agreement.

. . . away back then . . .

When I was a boy, we lived on the very edge of an angler's and hunter's paradise known as East Harbor. Early in this century that

happy hunting ground would be so crowded with potential duck dinners that you unfortunate Johnnies-come-lately wouldn't believe it if I had pictures to prove it. But in betweeen all those goodies, acting as though they were equals, were these spoil-sport coots or mudhens.

No, Fulica the Coot and his mud-hen mate are no ducks. They belong to the family of rails—not the kind trains run on or the kind split by Abe Lincoln. It comes, rather, from a verb meaning to scold, upbraid, berate, revile or nag. And are they ever noisy! Many a night we could hardly sleep for that nocturnal cacophony of gutteral wrangling and backbiting that went on below us where bitterns, the coots and rails, the great blue and the black-crowned night herons, an occasional loon, and a dozen kinds of wild ducks were whooping it up! Of course, the coots were the loudest, for there were so many more of them.

. . . to cook a coot . . .

Once, my brother proudly brought home twelve of these unprized birds. I didn't know about it for I had ridden to the county seat for groceries on the day of this successful (?) hunt. Waiting for me at our favorite store was this message, telephoned in by mother: "Stop at library and find out what a coot eats." The request didn't surprise me—Mom was always eager to increase her knowledge of the world.

So I consulted the works of ornithologists and learned that mudhens are amazingly "vegetarious" . . . I know there isn't such a word, but there ought to be. The diet of a coot, if I remember correctly, adds up like this, percentage-wise:

Water vegetation	88%
Water insects	7%
Mollusks	3%
Misc. water animals	2%

Mother was satisfied that all this chlorophyll made coot flesh above suspicion as the piece de resistance of a family meal . . . surely the diet of a chicken, when compared to that of a coot, left much to be desired. Anyone could understand that.

Well, Brother laboriously plucked the coots (one will weigh about 1½ pounds unplucked) and mother, as always, cooperated. To rid the birds of the "wildness" she believed to be within, she parboiled them a number of times, and each different water was steeped with onion, sage, and other conditioners I don't remember. Finally, the creatures were stuffed and roasted and placed before us on the table. They smelled heavenly but something about them . . . probably just the appellation . . . was enough to turn us off. None of us save Brother and Mom would eat them!

Mother was one of those rare early conservationists, and as the days passed, she fricasseed or fried, sautéed or stewed, à la kinged or hashed those birds until they were worn out or gone. Brother always declared (stoically, I thought) that coot prepared in any way was delicious, but he never brought home another mud-hen to augment the country sausages, sugar-cured hams, t-bone steaks, or roast turkeys that made our big farm kitchen so redolent.

I have before me a tome, published in England in the last century, that contains this gem of helpfulness on the subject:

"The flesh of the Coot is very variously regarded as food. To prepare the bird for the table, the feathers should be stripped off and the down, which is very close, thick, and hard to pluck, be rubbed with powdered resin; the body is then dipped in boiling water, which dissolving the resin causes it to mix with the down, and then both can be removed with tolerable ease. After this the bird should be left in cold spring-water overnight which should make it look as white and delicate as a chicken. Without this process, the skin after roasting is found to be very oily, with a fishy flavour, and if the skin be taken off, the flesh becomes dry and good for nothing."

It grieves me that Brother and Mom

didn't have this information back then.

Some of the mudhen's relatives of other genera are considered good food and game birds and are praised by gourmets. They include the larger rails, the colorful purple gallinule, and its less conspicuous cousin, the Florida gallinule.

. . . et cetera . . .

My observations would aver that coots, though as crazy as loons, make good parents. I have found only two occupied nests in recent years, but both were creditable. One consisted of a great mass of swampweed debris dragged atop a derelict rowboat that was held in place by a dense growth of cattails. It rose and fell with the harbor's water level. The other nest used the peak of an abandoned muskrat lodge interwoven in the limbs of three close-growing buttonbushes. Here, no extra nesting material was necessary. The birds just rearranged what was already there. One nest held seven, the other nine eggs evenly peppered with fine brown dots. The young of coots are lovable bits of soft, downy fluff as precocial birds invariably seem to be.

Last summer I returned like Tennyson's "Brook" to my "haunts of coot and hern," and found not a sound or sight of a coot or even of a rail. East Harbor has ceased to be an angler's or hunter's paradise; it has become a water skier's Valhalla. One of the roaring monsters was towing a bevy of seven Brunnhildes around and around the reedless, muddy water that even a zany coot would now fear to cross.

Waterfowl I.D. Booklet Given With Subscription

As long as our supply lasts, a copy of **Key to North American Waterfowl** will be given free with each 3-year subscription to GAME NEWS. This full-color, 32-page booklet identifies and gives much information on 62 species of ducks and geese. It is printed on "plastic" paper which makes it waterproof, impervious to oil and grease, and essentially tear-proof.

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Some Thoughts on Summer Wildflowers

By Bill Rozday

"But he turned first, and led my eye to look
At a tall tuft of flowers beside a brook,
A leaping tongue of bloom the scythe had spared
Beside a reedy brook the scythe had bared.
I left my place to know them by their name,
Finding them butterfly weed when I came."

THE TUFT OF flowers which inspired Robert Frost's famous poem was butterfly weed. Butterfly weed blooms in fields and on waste ground throughout Pennsylvania. I can't imagine anyone so merciless as to mow this brilliant flower.

Since butterfly weed is a cousin of common milkweed, many refer to it as orange milkweed. Nursery catalogs carry ads for "butterfly flower." The flower must have been named for its popularity with butterflies; approach one of the bushes in a field and you may frighten off a half-dozen kinds of butterflies.

Common milkweed is known by its silk-lined pods, but surprisingly few people are able to identify its summer flower, which appears during July. The flowers look like lavender popcorn balls drooping from their stems. Bees hum constantly around the stand of these flowers, and other insects crawl over the blooms. The sweet scent and steady humming meet your senses while you are still ten feet away.

While brilliance is the butterfly weed's outstanding trait, fragrance marks the evening primrose's. Evening primrose is much like a large buttercup. A deep breath from one of these flowers is a true summer highlight.

Summer wildflowers abound in an unmowed field. Last year we found hundreds of bee-balm plants in a drainage area of a field surrounding a Butler County reservoir. Bee-balm's red flower is so deep that it seems to glow even in shadow. These were the healthiest plants I had ever found with flower heads resembling sunflowers radiating outward as much as four inches.

Hawkweed has two highly descriptive nicknames. It is sometimes called "grim the collier," because the fuzz on its spindly stem suggests the dusted stubble on a coal miner's face. The nickname "devil's paintbrush" may be even more apt. The dab of flower at the tip of hawkweed's stem is amber-red, and has a light, sweet fragrance.

Two summer wildflowers that provide a dainty touch to a bouquet are deptford pink and blue-eyed grass. Each is essentially a star on the end of a grass blade, one pink and the other sapphire. I have found both in the fields near the reservoir.

A number of wild and semi-wild lilies bloom in the summer months. In another drainage area near the reservoir, hundreds of lilies, all of the same species, bloom during July.

These lilies are visible from hundreds of yards away as a sea of orange. They are tiger lilies, the most magnificent of their kind, and they adorn plants five and six feet tall.

Peterson's *Field Guide to Wildflowers* is a convenient and comprehensive book about these beautiful summertime blossoms.


BUTTERFLY-WEED
TIGER LILY
ORANGE HAWKWEED
COMMON MILKWEED
BEE-BALM



ABOVE IS a "hickory horned devil," also known as the royal walnut moth caterpillar. A hickory tussock moth larva munches away below.



SEEN BELOW—and also seen from below as it travels along a stem—is a pale tussock moth caterpillar.

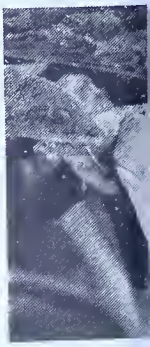


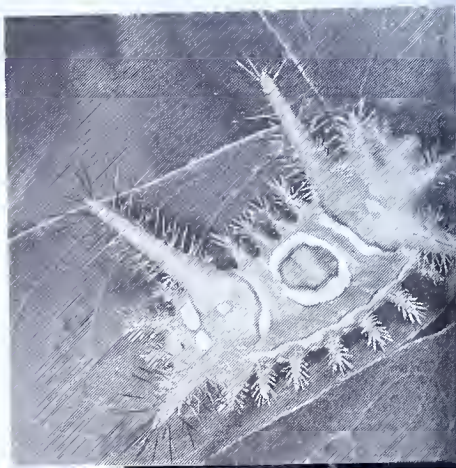


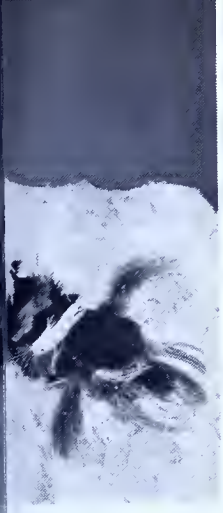
The Minia

PENNSYLVANIA OUTDO
the leaves of trees, weed
may see a crawling parade of
of different kinds of butter
Pennsylvania flora. Some, li
moth, injure crops, while oth
emperor caterpillars carry
pillars are absolutely harmle
shapes rival anything on dis
them the next time you're a

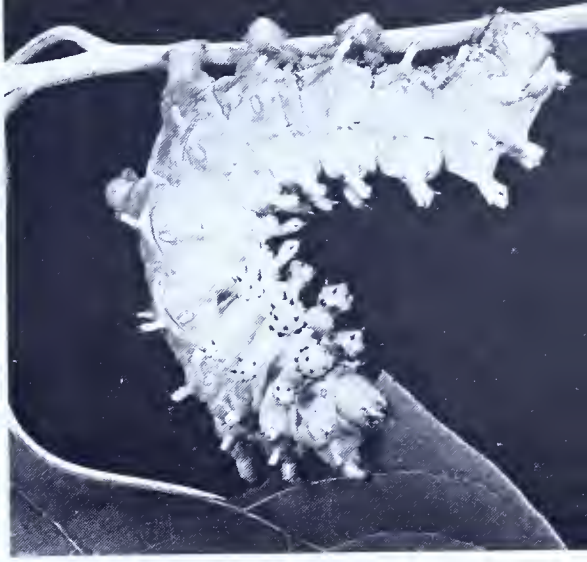
THAT IMPRESSIVE-looking insect below will become a saddle-back moth. At right is the tomato hawkmoth caterpillar.







NOPE, THAT creature at left is not a psychedelic pipe cleaner—it's a milkweed tiger moth larva. At right is a cecropia moth caterpillar eating sassafras leaves.



Monsters

nusiasts who look among ner plants during summer pop-art monsters. Scores noth caterpillars feed on rva of the tomato hawk as the saddleback and Io spines. But most caterple, and their colors and n art museum. Look for

By Karl Maslowski





THE SPICEBUSH butterfly caterpillar, above, looks ferocious. Below the Io moth caterpillar displays its spines.



FIELD NOTES

Hog-Tied and Calf-Kicked

BEAVER COUNTY — Early in March, two workers at Crucible Steel in Midway caught and hog-tied a buck which had wandered into the mill. Deputy Ammon and I transferred this deer to State Game Lands 173. If it wasn't for these men, I'm sure the deer would have become just another statistic.—District Game Protector G. T. Szilvasi, Midway.



Chain of Children

SCHUYLKILL COUNTY — While working an exhibit, I noticed many people having trouble keeping their small children in sight and under control. But two ladies in the crowd seemed to have the situation well in hand. They had tied their six small children together with a long piece of rope. Sort of reminds you of a pair of ducks leading their offspring to water for the first time. I guess there must be a little animal instinct left in all of us.—District Game Protector Chester Harris, Pine Grove.

Wooden't You Know It

LUZERNE COUNTY — Recently one of the office girls in the Northeast Division told us that she and her husband wanted to sell a large walnut tree, which had been on their property since her husband was a boy. We advised her to contact sawmill operators or advertise in the local paper. Well, when the word got out an enterprising lumber man came to see Mary all equipped with saws, truck, loading boom, etc., expecting to cut the tree and remove it. We later learned that the walnut was a dutch maple. The lumberer was somewhat disappointed, and so was Mary. She still has the tree—anyone for a dutch maple?—Law Enforcement Assistant R. H. Myers, Dallas.

Albino Redtail?

ADAMS COUNTY — While on State Game Lands 249 on March 20, my brother-in-law and I had the good fortune to observe an unusual bird of prey. While watching waterfowl on a small pond, we saw a "white" hawk glide along the opposite bank and land on a tree branch about 150 yards away. I trained my binoculars on the bird but was unable to identify it, even though I looked through my bird book. Finally, the hawk left its perch and I was able to see the mark I needed to make an identification—the bright orange-red tail of a red-tailed hawk. This bird was white except for the tail and a few black streaks on the wings.—District Game Protector G. W. Becker, Gettysburg.

Fast Friends

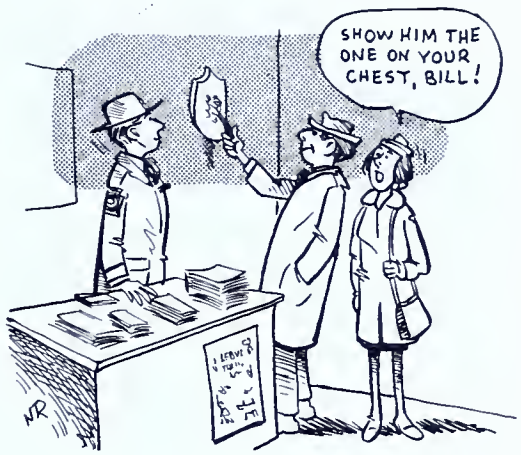
ADAMS COUNTY — I was asked to present a program to the third grade reading class in New Oxford about trapping and transferring wild animals. I was somewhat surprised at the interest the children had in the sports of hunting and trapping, and especially at the many questions about frogs, toads and snakes. It was gratifying to realize that these animals—which are considered obnoxious by most adults—have found a warm spot in the hearts of these youngsters.—District Game Protector J. J. Troutman, New Oxford.

Wildlife Bonus

Many sportsmen wonder where their money gets spent. Well, it took a long time to clear roadways and food plots of the brush and trees which "Mother Nature" knocked down on the first day of deer season last year. Even though the cost of cleaning up this mess will be great, wildlife will benefit from all the new brush piles and cover the storm created.—Land Manager R. B. Belding, Baden.

The Screech Owl's M.O.

ERIE COUNTY — The phone rang early one morning at the Girard State Police Barracks. Some folks near Fairview had heard a noise downstairs, but when Trooper Miller arrived he found no one. A second call precipitated a second search, which revealed a small screech owl. They called the game protector. I responded to find a much-frightened owl, a trooper and several bewildered people. I picked up the owl, turned it loose at the door and it promptly flew up into a tree. Apparently the bird had entered through a large fireplace. —District Game Protector R. W. Meyer, Fairview.



"You Can't Fool Me . . ."

CAMBRIA COUNTY — For the Johnstown Outdoor Recreation Show, I prepared a turkey "exhibit." Deputy Bollinger has the breast of a male turkey mounted on a wooden plaque, no head or tail present, just a patch of feathers with the beard as it appears naturally on the tom turkey. The amount of questions I got on this mount was surprising. Some folks looked to see where the beard was attached, and others pulled to see if it would fall out. When told what it was, some half-smiled and walked away as if we were trying to pass off this crazy concoction as actually being part of a turkey.—District Game Protector D. W. Jenkins, Patton.

How Time Flies

PHILADELPHIA COUNTY — On March 29, 1965, 23 recruits reported to the Ross Leffler School of Conservation for the 12th Student Officer's Class. After 11 months of training, all were graduated and assumed various duties throughout the Commonwealth as representatives of the Pennsylvania Game Commission. Those same 23 men remain on the job today—some 10 years later.—District Game Protector T. C. Wylie, Philadelphia.



Experience the Best Teacher

MERCER COUNTY — This past spring, I picked up a few pointers on checking wood duck nesting boxes. One, try to get Mother Nature to cooperate with ice hard enough to walk on (it's hard work breaking ice in front of a canoe). Two, for those boxes that are too high to look into, have a ladder handy (the owl that decided to take over the box will resent a human hand and will let you know it). Three, and this is most important, have a partner you can trust steady the canoe when you stand up in it to paint the boxes (if not, the odds are ten to one that you are going to get wet).—District Game Protector L. P. Heade, Mercer.

Change of Heart

BERKS COUNTY—Received a call from a woman who wanted permission to shoot a rabbit that was eating her flowers. She insisted that rabbits were dirty animals and should be shot. We convinced her to try a trap. Two days later, she called to say that the pest was caught. She was concerned that the poor rabbit might freeze if I didn't come immediately and take it out of the trap.—District Game Protector J. A. Leiendecker, Reading.

Remember the Pen . . .

ERIE COUNTY — Recently, some anti-hunting articles have appeared in our local newspaper. One Union City eighth grader, Jeff Bennett, took up the challenge and wrote a very good letter to counter some of their accusations. Jeff has written and asked me to urge that other conservationists write letters to their local newspaper in support of hunting. I have to agree with Jeff—it's time we all sit down and start writing. Remember, the pen is mightier than the sword.—District Game Protector W. A. Lugaila, Waterford.

Thanks Again

LUZERNE COUNTY — Last winter, a Pennsylvania State Police helicopter piloted by Troopers Donnini and Rossi again proved to be a valuable asset to our work. We used the chopper to conduct aerial surveys of fatal hunting accident scenes; the helicopter also brought a metal detector used to locate bullets. We appreciate the assistance.—District Game Protector R. W. Nolf, Conyngham.

Won't Sit Back

HUNTINGDON COUNTY—While many sportsmen's clubs sit back and absorb abuse from the anti-hunting faction, one 18-year-old man decided to do something about it. He distributed approximately 320 form letters to gun shops, individuals, service stations, etc., in Huntingdon County, hoping the hunters in the area would mail them to their Senators—Scott and Schweiker—and also to the Consumer Products Safety Commission. The man was my son.—Law Enforcement Assistant J. D. Moyle, Alexandria.

Unidentified Cackling Object

INDIANA COUNTY – One of our local residents was painting his porch one day. Suddenly, something struck him in the side of the head and knocked him off the stepladder, stunning him. Paint-spattered and somewhat dazed, the man finally got to his feet. His wife came out of the house and showed her husband the object that had hit him. On the ground was a hen pheasant, also stunned. The woman picked the bird up, brushed it off and turned it loose. –District Game Protector J. E. Deniker, Homer City.

Attack of the Flying Rats

BEDFORD COUNTY – Jeff Loser, soil conservationist at Bedford, was watching a heavy equipment operator working on a conservation project. The operator was pulling down a hollow tree, when suddenly a group of flying squirrels came gliding out of the tree directly toward him. One of them actually landed on the machine. The man jumped out of his seat and shouted, "Rats, rats, flying rats! They're after me!"–District Game Protector B. L. Warner, Bedford.

Teetering on the Verge

MONTGOMERY COUNTY–When a problem is unsolvable–or trivial–that seems to be the time to call a game protector. Here are a couple of recent calls. A woman phoned to complain about a mouse in her bedroom; then a young lad called and wanted to know if I had any baby chickens he could give his friend for Easter. I think I have bats in my belfry; anyway, I keep getting a busy signal when I try calling myself.–District Game Protector B. J. Schmader, Collegeville.

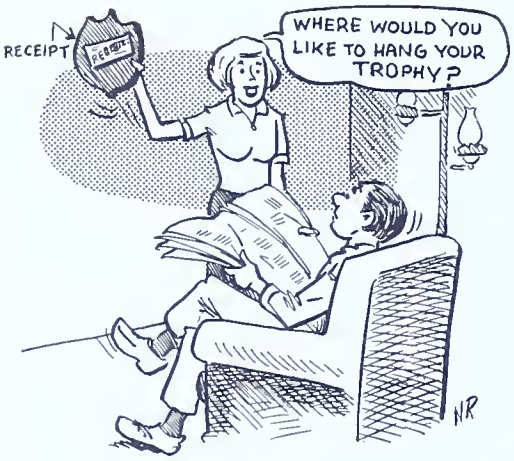
Warning

BUCKS COUNTY–A group of elementary school children gathered up a beautiful gray fox, which they found shivering on unsteady legs near their bus stop, and toted it home. The fox was docile and unafraid. He permitted them to pet him, cuddle him, and accepted food and a cozy bunk in the garage. Everything was fine until a sudden movement by one of the youngsters resulted in a bitten hand–the fox's sharp canines broke the skin and transferred some saliva. Laboratory examinations determined that the fox was rabid, so a nine-year-old Argus boy had to undergo a painful series of fourteen injections. This all goes to show that no matter how pathetic, docile or friendly a wild animal may appear, it is still wild.–District Game Protector W. J. Lockett, Perkasie.



Not in the Bird Book

PERRY COUNTY – One evening earlier this month, Waterways Patrolman Ben Leamer came to my home prior to attending a meeting. As we left the house, we were looking at the beautiful sunset when a large "bird" caught my eye. I asked, "Is it a hawk or a buzzard?" Ben informed me that it was a "bat kite" the neighbor kids were flying.–District Game Protector L. Everett, Newport.



$200 Trophy

CUMBERLAND COUNTY – Last season, deputies Galen Karper and Gerald Magee stopped to check a buck at a hunting camp and observed a deer tail on the porch. Since the deer they had checked still had his flag attached, they inquired about the "extra" tail. Finally one of the hunters confessed to shooting a doe. As it was his first deer, he wanted to keep the tail as a trophy. We kept the tail, but he still has a trophy–a field receipt for $200.–District Game Protector J. R. Beard, Shippensburg.

Exotic Cuisine

WESTMORELAND COUNTY – Recently I attended a "wild game dinner" held by the Youngwood Sportsmen's Club. This is an affair that attracts over 500 people annually. Club members donate wild game which they have taken on hunting trips throughout the United States. They have quite a varied menu, including white-tailed deer, mule deer, elk, caribou, antelope, Dall sheep, mountain goat, buffalo, beaver, racoon, muskrat, opossum, rabbit, squirrel, pheasant, snapping turtle and rattlesnake.–District Game Protector R. D. Buss, New Stanton.

Quote–Unquote

JUNIATA COUNTY – Deputy Bill Hubler was talking with John Walters of Mifflintown. John said he'd seen a flock of geese that were really flying high. He said, "My gosh, Bill, I saw one flock so high up in the air they could have coasted clear into Canada."–District Game Protector R. P. Shaffer, Mifflintown.

Real Public Assistance

ERIE COUNTY – In times of general public non-involvement, it's refreshing to receive cooperation in prosecuting a deliberate Game Law violator. A recent case involved an individual who had shot three deer (two from a snowmobile) and a female accomplice who helped conceal the deer. They were convicted and fined $709, based on the testimony of four individuals who saw the events. All witnesses gave of their own time to appear in court.–District Game Protector A. C. Martin, Erie.

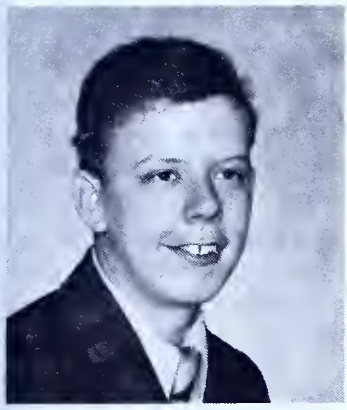


Not In Funk & Wagnalls

My brother Garnet, an avid turkey hunter, recently informed me of a new definition for the word "silence." He says silence is that period of time between making your best call of the day and receiving no answer.–Land Manager Kenneth M. Zinn, Dauphin.

CONSERVATION NEWS

By Ted Godshell



TERRY KORB



RON McNAUGHTON



TERRY MURPHY

1974 Wildlife Conservation Awards

FOR THE THIRD straight year, Ron McNaughton of Derry Area School, Westmoreland County, won the FFA Wildlife Habitat Development contest. Terry Korb, Clearfield Area School, Clearfield County, was the second-place winner, and Terry Murphy, Kennard-Dale School, York County, took third place. Vo-Ag instructors for these young men were D. C. Fretts, W. J. Mackereth and R. G. Travis.

In the Game Commission's six field divisions, the 1974 winners were: Northeast—Douglas Lee Dick and Randy Walsh, of Grove City School, and Kevin Murdock, Mohawk School. Southwest—Tom Krepelka and George Critchfield, Somerset Area School, and Jeff Hedges, United School. Northcentral—Harry Reltmyer, Frank Hillman and Gary Shirey, Clearfield Area School. Southcentral—Dave Hook, Middleburg School, Richard Knisely, Cumberland Valley School, and Randy Gutshall, Shippensburg School. Northeast—Mark Kerr and Randy Pipher, Troy School, and Keith Weaver, Canton Area School. Southeast—Jerry Kreiser, Annville-Cleona School, William Brice, Northern York Co. School, and Bruce Buffermeyer, Annville-Cleona.

The Pennsylvania Game Commission and the Pennsylvania Department of Public Instruction co-sponsor this competition. It is open to any vocational-agricultural student in the state. Students set up work plans in land management, predator control, conservation education, marsh and stream development, firearms safety, etc. These plans must be approved by the student's Vo-Ag area advisor and teacher and the local game protector. Game Commission representatives and Department of Public Instruction personnel inspect the projects. Judging is done by comparing the area with photos taken before work started. Prize money of $1000 is divided among the winners.

GROUSE GOODIES

By Robert A. Fala
Illustrations by Linda Sheaffer

ALTHOUGH THE RUFFED grouse is the state bird, many hunters go through the season seeing few or none of these secretive gamebirds. Year after year most grouse are bagged by a select minority of "grousers." The wise sportsman knows that ring-necked pheasants are usually found only on and about farmlands, but what about grouse? Since Mr. Ruff is more of a forest bird and there are more than 17 million acres of forest in Pennsylvania, just walking through the woods haphazardly may be like trying to find a needle in a haystack when it comes down to grouse gunning. But all isn't hopeless. A simple knowledge of some "grouse goodies" and where these foods are found can drastically improve the flushing rate of our fantailed friend.

Before talking about some specific delicacies, a look into the general types of grouse cover is in order. The grouse is considered an early successional or "brush" species, a bird of the new forest. He can't resist areas such as reverting farmlands, logged tracts, rejuvenating strip mines, or burned over sites. He is also likely to be found in laurel, alder, or rhododendron thickets along streamsides. All these areas are tough walking, so strong legs and brush pants are required. Brushy areas with small, grassy openings, and some scattered conifers bordered by a forest or lowland stream indicate "grousy" areas. Describing this type of habitat, John Madson of Winchester-Western says, "Grouse like variety; they like difference." He also says, "It's hard to describe good grouse cover, but a hunter learns to know it when he sees it."

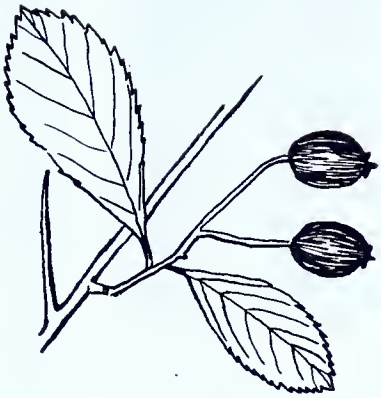
Now that we've got a general outlook on the appearance of habitat and where to look for it, where are favorite foods located and what are they? Curiously enough, choice food plants may actually make up a good portion of this brush habitat. Since grouse have a small traveling radius, they are rarely far from choice foods. Wild grapes are like strawberry shortcake to grouse, and birds are very likely to be found near grapes especially when fruit is abundant. The seasoned grouse hunter approaches these vine thickets in anticipation of that **Br-r-r-r!** of a grouse flush.

Another favorite food is thornapple or hawthorn. The hawthorn can be easily identified by its sharp thorns and mini-apple fruits. Another native fruity shrub to watch for is the blackhaw, or viburnum. This branchy shrub has blue-black pea-size fruits. Mr. Ruff has also developed a taste for some introduced or alien shrubs. The Japanese barberry would be an example. This shrub is commonly planted in hedgerows in towns and gardens but it is now scattered here and there in the wild. The orange-red fruits are egg shaped and about the size of a pea. These fruits are a "hot tip" for birds if they grow wild near your hunting area.

Blackberry plants are common and well known, so be sure to check these out. Aldo Leopold, a great



BLACK HAW



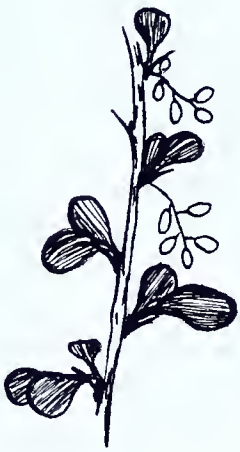
COCK'S-SPUR
THORN



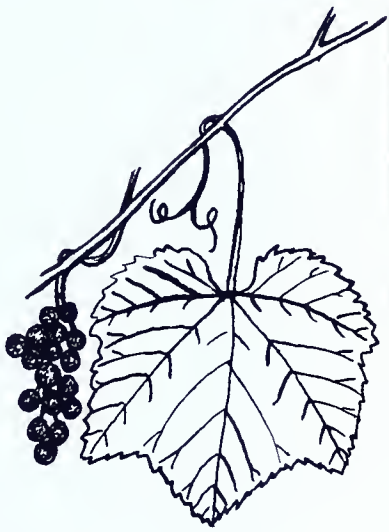
FLOWERING
DOGWOOD



SMOOTH
SUMAC



JAPANESE
BARBERRY



FOX GRAPE



BIGTOOTH ASPEN



TREMBLING ASPEN



early conservationist, called the blackberry leaves "red lanterns," due to their color in the October sun. Walking from one such briar patch to the next "will likely take you where the birds actually are," according to Leopold. Some other grousy plants to keep an eye out for are the dogwood and sumacs. The dogwood's pretty white spring flower turns into a cluster of a few rich, red berries. Grouse also eat the seeds of sumac, found in large reddish clusters at the top of the plant.

In addition to fruits, seeds, and leaves, grouse also feed on buds, especially in the winter when other foods may not be available. This is the season when aspen becomes important. On aspen there are flower buds and leaf buds. Recently, biologists have learned that grouse show a preference for the male flower buds. So keep an eye out for aspen, particularly in the late season.

There you have it: grapes, hawthorn, blackhaw, barberry, blackberry, dogwood, sumac, and aspen. These aren't the only species grouse feed on, but they are favorites. Examine the crop or stomach of each grouse bagged and keep a record. You may find some new local "grouse goodies" that will improve your hunting for many years. Grouse aren't easy to bag, but gunning for them provides a real challenge and quality sport. And remember what the father of wildlife conservation, Aldo Leopold, once said: "There are two kinds of hunting—ordinary hunting and ruffed grouse hunting."

Recommended Reading

Gullion, Gordon W. 1972. **Improving Your Forested Lands for Ruffed Grouse.** Ruffed Grouse Society of North America, Rochester, N.Y.

Leopold, Aldo. 1949. **A Sand County Almanac.** Oxford University Press, New York, New York.

Madson, John. 1969. **Ruffed Grouse.** Winchester Press, East Alton, Illinois.

EDITORIAL . . .

(Continued from page 1)

times more through falls and three times more through drowning.

"My final objection to federal firearms control rests on moral and philosophical grounds. Gun owners, hunters, sportsmen, collectors, and shooters are, as a group, probably the most law-abiding people in the entire United States. They are not potential killers and menaces to their communities as the anti-firearms campaign portrays them. Virtually every gun organization and club in the U.S. sponsors, conducts, staffs and supports training and safety courses in firearms. To penalize these people who use firearms for lawful purposes because of the criminality of a minute number is not in conscience with the fundamental American principle of justice and fairness. Nor does it set well with our heritage and our history as a free people."

—Rep. Steve Symms, of Idaho, presented the above comments before the Subcommittee on Crime of the House Judiciary Committee.

WOODLAND THOUGHTS

BY LOU HOFFMAN
Wildlife Education Specialist



With the spring gobbler season gone and those early trout pangs subsided, summer's heat is just around the corner. Animal life is abundant—but so is vegetation—and the deer that "stood out" a few months back now blend into the roadside thickets. Slipping into summer's lethargy, it's easy to miss a host of these seasonal happenings. Familiarity has a lot to do with our reaction to the season and our woodland thoughts, but trying to decipher these mental impressions makes these outdoor experiences richer and more rewarding.

THE SUMMER woods is a crowded place. Witch hazel, spicebush, honeysuckle, and sweet fern choke the ground and make seeing tough. Upstairs the leafy canopies hide even the most vocal songsters. But there's a lot to be seen now, and the patient observer discovers many hidden treasures. What is a treasure to one naturalist may be overlooked by another, and common, familiar things are taken for granted.

When was the last time you looked closely at some chicory? That's the common roadside "weed" with the clear-blue flowers. Seen almost everywhere, the flowers are around into the fall but seem to peak during June. Crowding roadsides, their nearly naked stems stand rigidly supporting a half-dozen fringed and square tipped flowers. They're so common that we hardly notice.

Ground ivy is another common, but not so conspicuous, June wild flower. Woodland trails and even lawns harbor these tiny plants with scalloped leaves and delicate purplish flowers clustered about the leaf stems —another beautifully intricate but taken-for-granted piece of the landscape adding to summer's greenery.

Although chicory and ground ivy are frequently overlooked, the wildlife of early summer are not so neglected. Their motions and antics make them stand out more than the stoic members of the plant community. Youngsters of all shapes and sizes keep their parents on an overtime schedule, for the members of wildlife's "society" are greatest in number now. But already populations are being culled by predators, disease, storms . . . and the cycle goes on.

Mountain laurel, a rather common plant, invites different thoughts—maybe just because it's our state flower. Hues of the laurel, ranging from white to deep pink, create woodland backdrops not soon forgotten by human intruders. Mountain laurel is larger than a wildflower and has ornamental relatives which may have something to do with our feelings toward this plant.

Does and fawns are a familiar part of early summer and they, too, are noticed more than some of the other





Photo by Leonard Lee Rue III



WHAT COULD BE more common than crows, deer, chicory, gray squirrels and mountain laurel? While these plants and animals are relatively plentiful, they possess an innate beauty that creates a special feeling in the heart of the beholder. These life-forms can all be found in Pennsylvania's fields and forests.

Photo by Karl Maslowski





season regulars. We discriminate freely, liking some things and neglecting others.

Last June I was driving through Alan Seeger Natural Area in Huntingdon County and stopped to investigate a mountain stream. Time and current had joined forces to expose jagged rocks and roots along the bank. That harshness was eased in an almost maternal way, by the protective canopy of rhododendron and hemlock. A phoebe flitted about, troubled by my presence, as her nesting site was under a nearby bridge. Streams, rhododendron, phoebes and hemlocks are all familiar things, but the setting was different and the effect pleasant.

Then another person drove by and a work crew parked next to my car for lunch break. Engine noise seemed out of place here, and the squeaking of brakes equally foreign. I could have tried to ignore those intrusions, but the setting had been changed and I wanted to leave—something the phoebe couldn't do.

For the outdoorsman, knowing an area is an important part of the woodland experience. It's more important than a limit of squirrels, woodcock or trout. A successful time cannot be measured in consumptive ways. Yet there must be something that makes a given place out-of-the-ordinary or different.

Knowing just what is "special" about a ridge or wooded hillside is hard to explain. It might be the forest type (hemlock, beech, birch . . .) or maybe the physical land forms, or maybe a place where something memorable once took place. But whatever it might be, the outdoorsman has these personal nooks that bring back a good feeling. Men are especially guilty about not sharing these sensitive thoughts—the stoic, conquering pioneer spirit dies hard.

It may be hard to pin down just why familiar things are important, but this thought process is certainly worth the effort, as the answer will add to the enjoyment of an area. The natural world has more to offer than we can hope to absorb, but developing personal attitudes toward wildlife will make our outdoor experiences—and this natural resource—an even more significant part of our lives.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Handloader's Digest, ed. by John T. Amber, Digest Books, Inc., 540 Frontage Rd., Northfield, Ill. 60093, paperbound, large format, 288 pp., $7.95. The most complete catalog of handloading tools and components available, plus 25 feature length articles. As always, useful and interesting data for the shooter who rolls his own.

Practical Pointer Training, by Sherman Webb, Winchester Press, 460 Park Ave., NYC 10022, 178 pp., $6.95. Tells how to select a bird dog, details early and advanced training, tells how to correct faults, and covers related subjects such as kennel sanitation, mange cure, force-breaking, etc.

Hodgdon's Reloading Data Manual Number 22, Hodgdon Powder Co., Inc., Shawnee Mission, Kansas 66200, 192 pp., $2.95, hardbound. Bruce Hodgdon is the man who made World War II surplus gunpowders, including the renowned 4895 and 4831, available to handloaders. Currently, 20 different powders, varying in burning rate from HP38, suitable for squib handgun loads, through H570 and H870, the best propellants for Magnum cases such as the 6.5-300 Weatherby-Wright-Hoyer, are supplied by Hodgdon. This manual lists loads for all these "H" powders, including his newly manufactured 4831 (which is not the same in burning rate as Dupont's recently introduced IMR 4831 but rather duplicates the original surplus powder).

Remembering One of America's Heroines . . .

Tsa-ka-ka-wias

By Susan M. Pajak

Bird Woman of Shoshoni blood:
Across the wilderness north your
immortal footsteps marked the way,
clear and precise like the track
of the doe . . one by one . . never
faltering. Sakakawea, your path
thunders of raw courage, denial
and tribulations



CAPTURED in 1800 by the Minnetarres during a probable woman- and horse-stealing raid on their camp, 14-year-old Sakakawea (Tsa-ka-ka-wias) of the Rocky Mountain Shoshonis was, as a result, tossed ruthlessly into a Hidatsa Indian village on the Missouri River hundreds of miles away, wrenched forever from the sight of her mother and father.

Shortly afterward she became the property of a French-Canadian fur trader and trapper, Toussaint Charbonneau, who resided there. He won her in a gambling game. At the time he already had one wife, also a Shoshoni captive. In 1804, when Sakakawea became 18, he married her, too. Thus Charbonneau claimed two Shoshoni captives as wives.

That same summer Meriweather Lewis and William Clark landed at the Mandan villages on the Missouri, which were close to the Hidatsas. They made known their plans for exploring the region to the northwest. Charbonneau and Sakakawea were hired as guides, possibly because of mention that she had been captured from that area four years earlier.

Sakakawea probably thought no more of this than a journey back to her people; it is doubtful she fully understood the proportions of the plans which now depended on her, one of which was to inform the various tribes along the way that they were now subjects of the United States!

The slim thread by which she held together the peace between the white man and the Indian, not only then but for a time to come, can hardly be expressed adequately. Sakakawea

GIRLS, GUNS, & GAME...

alone had literally opened up the Northwest in the development of our country.

With her infant son, Baptiste Charbonneau, strapped on her back, the expedition through the northwest wilderness began on April 7, 1805, with the party reaching Three Forks, Montana, in July. At the specific direction shown by Sakakawea, they chose the northernmost stream which took them to her people.

Of her family all were dead except one brother and an infant nephew; her brother determined to kill all the white men but through the intervention and pleading of Sakakawea their lives were spared.

So effective were her pleas for their cause that the expedition was supplied with horses, food and extra guides. Onward they moved, the group finally reaching the Pacific Ocean on November 7, 1805. All along the way everything they came upon, both flora and fauna, was recorded with Sakakawea's help.

The expedition started homeward in March of 1806, Sakakawea again guiding Clark (Lewis chose another way) through Bozeman Pass to the upper Yellowstone River, an area she knew well.

History is a bit uncertain as to when she died; some say in 1812 at about the age of 25, while others report she passed away in 1884 at the age of 100. Possibly the fact that Charbonneau had two wives caused the confusion.

Several statues have been erected in her honor in Oregon and North Dakota. For more information on these, see *America's Indian Statues*, by Marion E. Gridley.

Because of the determination and devotion of a 19-year-old Shoshoni Indian girl who had a perfect sense of direction, the Lewis and Clark Expedition to the Pacific via a northwest route was an unequivocal and monumental success the likes of which we may never again witness.

As the sun shines on us this summer, we might stop and remember her rugged journey across the Northwest 170 years ago this year.

GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9x12 inches on 11x14 heavy, coated paper, without the GAME NEWS logo. The set includes Ned's woodcock from the April 1974 issue; the woodchuck from July 1974; the doves from September 1972, and the buck and doe from the December 1971 issue. These prints are not available individually. The price is $3 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.



BLACK BEARS ROAM parts of Pennsylvania, but they are shy, man-fearing creatures which usually go the other way . . . and fast!

Dangers on the Trail . . .

Real or Imagined?

By Les Rountree

IT'S BECOMING more and more apparent that a lot of people who read this column are interested in backpacking. Or it just may be that backpackers are more active letter writers. Would-be backpackers certainly are. They want to know a heap of things that will help them to get started and I've been doing my best to oblige. We've talked about hiking shoes, packs, state trails and a host of other related things over the past few years . . . and we'll do it some more in the months to come.

This month, let's talk about some of the uncomfortable things that can happen to a hiker as well as some of the things that probably won't. A number of first-time woods wanderers worry about perils that are about as likely to happen as a buffalo stampede through Times Square. But their worries are very real to them. Let's debunk a few myths.

The Ferocious Wild Animal Myth. To the experienced Pennsylvania woodsman this will sound like a joke. However, a lot of citizens who would like to go backpacking (and they don't all live in the cities) are genuinely concerned about being devoured by bears, cougars, wildcats and wolves. First off, there are no wolves or cougars in Pennsylvania. There once were, about 150 years ago, a few of these big carnivores sticking about, but even then they were scarce and seldom seen. I know, I know! A cougar was shot out in the western part of the state a few years back, but that was probably an escapee from a wild animal farm and did not represent a threat to anyone.

There certainly are some black bears in the commonwealth, but I have never heard of a single, authenticated case of a black bear attacking a hiker or camper for the sheer fun

of it. Black bears are shy, man-fearing creatures who usually run the other way when human scent hits their nostrils. The exceptions are garbage-dump bears and park bears who get used to free handouts and become provoked when they don't get more.

Since hikers and campers seldom bed down near a garbage dump, there is little to fear. If a bear is seen in the middle of the woods, he won't be seen for long once he winds you. If a bear does show up around a public camp ground, where there may be a dump close by or where bears have been fed regularly, don't encourage it. Don't offer the black fellow bits of hamburg or candy. When you run out of the goodie, Mr. Bruin won't understand. He'll want more and may decide to follow you into the tent, camper or car. He doesn't want to hurt you, he just wants more of that good food and may cuff you up a little to get it. So don't give him any in the first place.

Should you run across a cub bear in the woods, don't admire the little fellow at short range—and above all, don't touch him. If the cub makes one squawk, mama will be there in an instant with murder in her eye. In fact, it's a good idea to leave all young woodland creatures alone; never under any circumstances move them or carry them around in your arms. They are not orphans—one of the parents is always close by.

Wildcats. Forget them. No danger here. If you even see a wildcat in the daytime, consider yourself very fortunate. In 35 years of hiking around this state, I've seen exactly one. They are notoriously man-shy and keep a wide distance between themselves and civilization.





ANY WATER SUPPLY can be contaminated, whether by garbage, chemicals or carrion. Rountree recommends boiling drinking water or treating it with purification tablets.

The Rattlesnake Myth. Contrary to some popular notions, rattlesnakes do not sneak around looking for some unsuspecting camper to sink their fangs into. Like most wild creatures, they much prefer to spend their days unmolested by everything. I don't think that a snake's eyesight is very good, but they certainly can "hear" through their entire bodies. With the slightest ground vibration, most snakes are long gone. There may in fact be occasional rattlers along the trail you are hiking on, but your chances of seeing one are quite slim.

Snakes of all types are ordinarily aggressive only when cornered or when stepped on. It's wise to avoid doing either. The vast majority of snakebite cases occurs when someone is showing off his snake handling skills or a small child playfully tries

to pick up the funny sounding thing. There are two poisonous snakes in Pennsylvania, the timber rattlesnake and the copperhead. Oh, yes, there is the small massasauga rattler out in the western counties, but it's very rare. They are all pit vipers and are easily identified by the rather flat triangular head. The copperhead is beautifully marked with hourglass shapes on its back that alternate between reddish brown and a yellow . . . almost gold color. The rattlers come in all sorts of colors from yellow banded to an almost pure black phase. The rattles are a dead giveaway. No other snake has them.

On the one chance in a million that you are or someone with you is bitten, what is the best treatment? Well, the experts have gone round and round on this one for years, and they are still doing it. The old bit of making an X-shaped incision into the fang marks and sucking out the blood leaves something to be desired. The cutting and slashing in a panic situation can cause more damage than the snakebite. Dr. Oscar Hoerner of Mechanicsburg, an outdoorsman of some repute, tells me his findings indicate a small excision is the best thing to do. This means, slice a thin wafer of skin from around the fang marks and allow the area to bleed. Apply ice or cold compresses and head for the nearest hospital. Now all of this is dandy advice but cutting a tiny "wafer" of meat out of my own leg or somebody else's is a little on the crude side. (I'd do it, though.) Applying a tourniquet is a no-no. This too can cause some additional problems.

WILD PLANTS ARE often edible, usually beautiful. But if you can't identify a plant, you should probably leave it alone or admire it from a distance.



The bite of a timber rattler can be painful and can cause permanent damage, but in most cases it does not. You have about one chance in a thousand of ever seeing a rattler, and one chance in a million of being bitten.

The Pure Water Myth. A pack of old tales give "sure fire" signs that water is safe to drink. If mayflies and salamanders live in it, it's safe, and so on. Forget all of them. Drink water from any source at your own peril . . . and that includes the faucet in your home. So many things can be wrong with drinking water that it's useless to list them all here . . . there isn't enough space in the whole magazine. The truth is, human beings have become amazingly tolerant of a lot of weird substances that wind up in our water supplies. The organisms that would make us sick if we drank the water in, say, Mexico or New Zealand would not affect the natives. Conversely, the water in your town probably would give a Mexican the screaming quick step. We have become adjusted to *our* water supply and any unfamiliar H_2O might make us very sick.

It's usually okay to drink from springs that are marked as safe. The water in most state parks is periodically tested and can be counted on . . . most of the time. If you have



MANY OF TODAY'S HIKERS use recreational vehicles as home bases for their trips. Others prefer backpacking and sleep under the stars or in a lightweight tent.

a water sickness history, carry a canteen of household water with you. Another solution is to buy a supply of water purification tablets (halazone is one kind) at your drugstore and carry them with you on all camping and hiking adventures. Boiled water is safe to drink. If there is any doubt about the source . . . boil it. It's a sure bet to render the "live" things harmless.

The Spider Myth. Like snakes and bears, spiders do not hang around dark, spooky places waiting to leap upon human beings. There are only two toxic spiders that I am familiar with that may exist in Pennsylvania, the black widow and the brown recluse. Both are extremely rare and seldom found on hiking trails or in the woods. Many spiders can and do bite human beings, but the bites are mildly painful at worst and cause no permanent discomfort.

Mosquitoes and the tiny "punkies" of the northcentral counties are *no* myth. They can be annoying and a series of bites can be most painful. I know no way to completely avoid these nasty creatures but a good bug lotion will help. I like the lotion instead of the spray. It's more potent and lasts longer. There are a number of good brands on the market. Cutter's and Johnson's Deep Woods Off are both excellent.

Bees, wasps and hornets probably are the *most dangerous creatures* a hiker will encounter in Pennsylvania. The common yellow jacket, the white-faced hornet and the inoffensive honeybee can be extremely harmful to some persons who are highly sensitive to their neurotoxic sting. Unless you are a professional bee handler, don't fool around with wild honey trees that you may stumble upon. Getting the honey out of such a place is a job for the expert.

Same holds true with a ground nest of yellow jackets or hornets of any kind. Stay away from any spot where you see the hovering insects nearby. All bee and wasp stings are painful



WILD STRAWBERRIES taste terrific. Common plants such as the strawberry are not hard to recognize, but other plants are inedible and some are even poisonous.

and en masse can cause faintness and even unconsciousness for some otherwise very healthy people. Immersion in cold water gives some temporary relief from stings. A drugstore preparation named Surfadil will also provide some slightly longer lasting relief from bee stings and an occasional touch of poison ivy.

Poison ivy is no myth either. Some persons are not affected by it in any way, but others are terrifically sensitive to it. If you suspect you have come into contact with it, the best thing to do is to wash the affected area very thoroughly with soap and water. Nothing else works quite so well. The very best preventative is to learn what poison ivy looks like and stay away from it.

It's another myth that all mushrooms growing on the ground are good to eat and those growing on wood are poisonous. In fact, this old trappers' tale is frequently told in reverse . . . which shows how much old trappers knew. There is no way I'm going to offer a complete—or even basic—course in mushroom identification. I'll leave that one to the pros like Ned Smith and Roger Latham. The very best way to avoid getting a bad mushroom is to learn the edible ones, one at a time, and pick only those that you're sure of. A good guide here is *The Mushroom Handbook*, by Louis C. C. Krieger (Dover Publications, Inc., 180 Varick St., New York City 10014.) Meadow mushrooms, puffballs and morels are reasonably easy to identify. But they too have some look-alikes that could cause trouble.

The hiker will frequently find blackberries, strawberries, raspberries, wild leeks, watercress and a host of other edible plants and fruits. The common ones are not difficult to recognize but there are some succulent looking things that grow in the woods that are unwholesome.

In case you want to really get into this wild food thing, pick up a copy of Euell Gibbons' book *Stalking the Wild Asparagus* (David McKay Co., 750 3rd Ave., New York City 10021). Even if you're not a hiker, it's fun reading. To sum up, I guess you'd have to say as the Dutchmen do—"the biggest is the least" and "the smallest is the worst." Little to fear from bears but watch those bees and microbes. All in all, the record is pretty good. Hiking must be an extremely safe sport. We haven't had anyone carried away by the wolves in years.

Bicentennial
Pennsylvania
1976



So your children can tell their children.

A Way to . . .

All-Summer Shooting

By Keith C. Schuyler
Photos from the Author



HUNTING CARP, Schuyler says, offers shooting opportunities similar to those encountered in pursuit of upland small game and big game species. All you need is the desire, a bit of imagination, and some specialized archery tackle.

AS WITH ALL bow hunters who look forward to the spring spawning of carp, I am disappointed if high and muddy water washes out the best shooting of the year. True, you can still get action if you know the spawning beds and hit it right, but bad water conditions certainly reduce the opportunities. Too often there is a tendency to hang up the bow or just look for woodchucks to fill in the summer months.

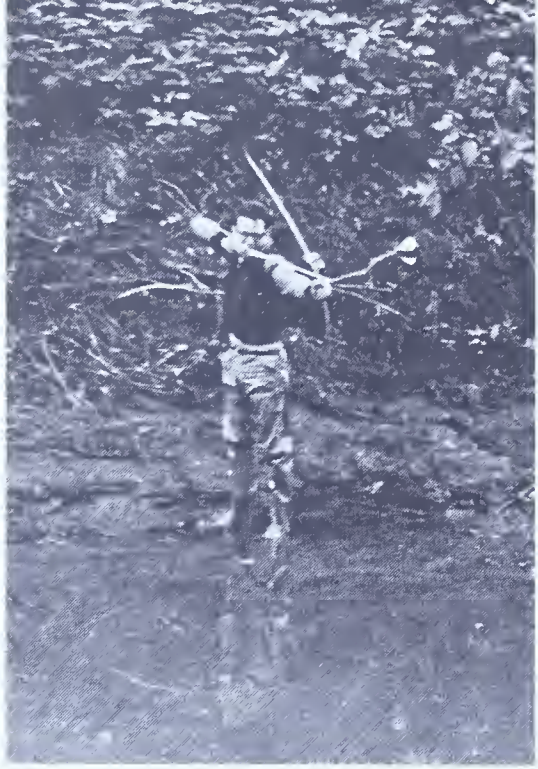
Those who do miss out on the more challenging sport offered in *hunting* carp.

The word *hunting* is italicized to call attention to the fact that, other than during the spawning period, shooting carp with the bow and arrow offers hunting opportunities somewhat similar to those encountered in the pursuit of upland small game and big game.

When carp are spawning, it is only necessary to know where they are to find action. At such times it is more a case of deciding which target to take rather than trying to just find a carp—particularly if the water is seasonally low and clear for the annual event. It is not unusual to have shots available to you in four different directions when the spawn is on and you are in the middle of it.

At other times you must hunt for your fish. This prospect offers almost as many variations, thrills and excitement as hunting for the more conventional dry-land game species. All you need is the desire, a bit of imagination, and some specialized archery tackle. The first two requirements come naturally, but some suggestions may be in order when it comes to tackle.

There is no question that you can use any bow you have to shoot carp, but for a number of reasons you may prefer to specialize a bit. In the first



THERE WILL BE mud. Boots will keep it off your legs, but some carp hunters prefer to slog along river banks wearing tennis shoes.

place, carp and mud are somewhat synonymous. You may shoot them off gravel bottoms, but you must usually move through mud to get into shooting position. When they are feeding in the spots where you are most likely to find them in other than the spawning period, the carp are over mud, you are in mud, and before it is over you and the carp and your tackle may be covered with mud, water, or a combination of both. There are happy exceptions when you use a boat or a canoe, but that comes under a different heading.

Since the usual way to hunt involves stalking along the shoreline, the mud may discourage you from taking a bow that compares in price to the average deer rifle. Further, since such shooting involves the use of a reel of some sort, you may not wish to subject even your hunting bow to such treatment.

Under the different heading aforementioned, hunting carp from boats or canoes adds another and interesting dimension to your sport. A short bow is best. Many shots are close, and trying to maneuver a long bow into shooting position can be awkward. A careless release can bang the lower limb into the side of the craft with unhappy results.

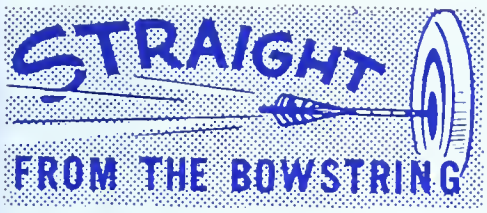
My particular choice for all carp hunting, since I keep one bow rigged just for the purpose, is an old 60-inch, 42-pound Bear bow that also has one notch for a 6-point whitetail buck. With it, on a semi-permanent mount of electrical tape, is a Zebco 202 spin-cast reel loaded with 12-pound-test monofilament.

Use of a fishing reel, spin cast or regular spinning, is my favorite choice. Although the subject has been covered here before, it should be mentioned that this combination of bow and reel permits the use of junk wooden shafts that are expendable in the event they can't be recovered. We fit the business end lightly into regular fish heads so they can easily dislodge in the event of a hit. This leaves the archer with only the special head in the fish to which is attached the monofilament line.

With such tackle, carp will frequently put on a good fight to double the pleasure for the bow hunter. It is little different than playing a fish with a throwline except that a regular fishing reel provides more positive control over the quarry.

Regular Bow Reel

The alternative, of course, is a regular bow reel. These come in various sizes and shapes. One, the Saunders Kwik-Mount, provides a large solid spool affixed to a metal frame which attaches easily to the bow by means of rubber-protected clamps, much in the manner of some bow quivers. On the spool is wound 50 feet of 80-pound-test line. A metal finger holds the line to prevent it from falling off when the reel is pointed downward toward a fish target. Yet it permits the line to flow freely from the reel on the shot. The line is wound by hand onto the reel itself. The fish is played directly



from the line when the bow is discarded after the hit.

Another Saunders reel, the Zip, employs a large open wire spool which operates similarly except that the spool is large enough that the archer both sights and shoots through the center of the reel. Like the other, this unit is fastened to the bow by rubber-protected metal clamps. Both reels are heavy-duty jobs which can serve for hunting anything from mussels to manta rays. They have a distinct advantage over regular fishing reels in that they can be clamped to the ends of the riser on the bow without the use of any adhesive material.

When after really big game such as sharks and rays, we use one of the regular bow reels to hold a portion of line which is taken from, but still is attached to, a heavy-duty rod and reel assembly. On the shot, the line flows from the bow reel, giving the archer time to grab the rod and be ready when all the slack is taken up by the fish. From that point on, the only difference from regular fishing is in that the quarry is fast to a fish arrowhead rather than a conventional fish hook.

Using the combination of bow and fishing rod is practical only when bow hunting from a boat, preferably one of sufficient size to permit such shenanigans. Trying to hand line some of the big fish can result in cuts from friction with water-softened hands. Of course, a lighter combo can be used even on average size carp to expand the sport.

There has been no mention of matching arrows to bows or concern about spine or weight or any other of the niceties connected with the usual approach to hunting. There will be none, simply because they are not necessary. The only concern relative to the arrow is whether it is heavy enough to carry the line being used without being dragged off course or unduly retarded in speed.

Shots are close simply because it is impossible to see targets at any appreciable distance. Refraction, that visual phenomenon which makes a fish appear to be where it isn't, would make hitting anything at considerable depths all but impossible even if enough power could be retained in the arrow to effect penetration.

Commercial fish arrows are of solid fiberglas. They are heavy, unyielding, and necessary when after big game. This is particularly true when hunting creatures which may have to be taken from fairly deep water. For instance, in hunting sharks, it is best to have about eight feet of fairly heavy wire between the line and the arrow. A shark's hide is like sandpaper, and the mini-brained creature will frequently wrap itself up in the line when the going gets rough. There is always the chance that it might bite through the line if it gets in the creature's mouth by accident or design. The heavy arrow will carry the

POLARIZING SUNGLASSES are a great help, Schuyler says. A strap to keep them from getting knocked into the water is a good idea.



heavy wire and cord without being overly deflected by the drag these create.

When it comes to fish heads for the arrow, there is a rather wide selection.

One of the more popular for carp-size targets is Al's Fish-Slick. This is a needle-point head with a pre-set fin projecting from the side of the head shaft. This acts as a barb when the target is struck. To remove the head, the fin is turned counterclockwise to match a slit into which it can be lowered to effect easy removal of the still-attached shaft. The fin-barb is reset for the next shot.

Sure Shot is the name of a head with a wire half-barb. The wire extends through the head shaft into a hole, to hold the thing in place. To release the head, the extension is lifted from the hole so that the half-barb can be reversed to effect removal from the fish. A heavy duty head by the same company has a double wire barb which is reversed simply by twisting the arrow shaft a full turn to unlock it. This can be done even if the arrow is inside the fish, without touching the fish.

CARP PROVIDE all-summer shooting, but you must hunt for them. Success depends upon angle of the shot, provision for refraction and using the proper tackle.



Fishing Head

The best heavy-duty head to come to my attention is the Sting-a-ree by R & D, Euless, Texas. This one will hold anything you can get the big (3¾ x ⅜-inch) sticker into over the 1½-inch barbs extending from the thick shaft. When folded against the shaft of the head, the two barbs extend the width of the head to $\frac{11}{16}$ inch; this is the frontal mass which must penetrate 3½ inches before the barbs can engage.

This is no problem on a soft fish such as a carp, but it takes a lot of power to effect sufficient penetration on the tougher species such as big gar and sharks. I filed down the point of a Sting-a-ree head as well as the leading edge of the folded barbs to make it sharper all around. (My suggestion to the company to do this in the factory didn't engender much enthusiasm.)

Even with this help, my 50-pound Wing penetrated a hammerhead shark only to the depth of *one* of the barbs. This was sufficient to take the strain of a heavy-duty deep sea fishing rod after the shark was struck. Nevertheless, I'd rather have had both barbs catch under the shark's tough hide.

The wire-attached head stuck and held even though the solid fiberglas arrow was broken by the fish in its struggles. Several broadheads were put into the shark by an archer from Georgia after two companions muscled the big fellow to the surface. It wasn't until the second broadhead drew blood that the shark ceased its turning and thrashing which had thoroughly wrapped up the fish line and wire. The shark had first been hooked by line after it refused to surface sufficiently to get an arrow into it.

One of the problems in bow fishing is in attaching a line to the head itself.

Monofilament, when using the lighter rigs, has a tendency to break easily. Consequently, it is important to use at least a double loop which should be passed through the eye, or hole, in the head of the shaft. The arrow can then be passed through this loop before it is pulled taut. This will provide double protection against wear from the metal edge of the steel head's shaft.

When using heavy tackle and regular fish arrows, we sometimes make a single loop of braided wire through the eye of the head with only enough clearance to attach a snap swivel such as is used in casting artificial lures. The line is attached to the opposite end of the swivel with an improved clinch knot. If you don't know how to tie the improved clinch knot, simply tie a loop in the end of the leader and pass it through the eye of the swivel. Again, you must repeat the routine of passing the loop over the entire arrow before drawing it tight.

Line Must Follow Arrow

To avoid the side drag of the line, or wire, when utilizing a fishing rod in conjunction with the bow, but without a reel, a means should be devised to force the line to follow the arrow as cleanly as posssible. If the nock end of the arrow doesn't have a hole in it, one can be drilled through. The line can be passed through this hole before it is attached to the head. It is important that the line is ahead and clear of the bow hand when the shot is made or some nasty cuts or brush burns can result when the line pays out.

A disadvantage of this arrangement on big fish is in the fact that broken arrows frequently result. Although solid fiberglas arrows are extremely hardy, the side pull against the fish can easily snap the shaft.

To avoid this, but still have the line follow the shaft, the line can be taped lightly to the fletched end of the shaft. For monofilament, a bit of masking tape or even such as Scotch tape will suffice. If a spin-cast reel is being used, the slack can be taken up by the reel to avoid any chance of the line getting caught on the hand or wrist. (Remember to disengage the reel before the shot!) The tape will pull free on a hit.



CARP LANDED ON monofilament line attached to a spin-cast reel. Line must be properly fastened to fishing arrows to ensure success.

With heavy line or wire, a turn or two of electrical tape will hold it in place. Experiment ahead of time to insure that the tape doesn't hold so tightly that the arrow will break from side pull when the fish is being played.

Not everyone gets the chance to try for anything bigger than a carp, but these come sufficiently large to provide excellent sport. And they are available close to home anywhere in Pennsylvania. Although the fishing-reel-monofilament combination may be a bit light for some of the larger fish if the archer is careless, it can spice up the sport. If it is numbers you are after, go heavy.

Carp feed early and late and during the hours of darkness in water where they can be seen and found. Midday hunting is largely a waste of time except during the spawning time. Even then best hunting comes at the times mentioned.

At other times you must hunt for your targets. For footgear you have your choice of hipboots or old tennis shoes. Waders are out, unless you just want them to move to shoals or flats where you might go over your hipboots en route, for if the water requires waders to shoot at carp, you are in too deep. You don't have clearance for your bow.

Actually, when hunting from shore, you are often right on shore when you shoot. Where possible, it is a good idea to do your searching from a high bank until fish are spotted. Then make a stalk to get into shooting position. Tread lightly. Carp are extremely wary fish and will usually spook at the slightest vibration from the bank.

Polaroid sunglasses are useful, as there is glare from the water at the best times to hunt carp. This is particularly true if you are facing the rising or setting sun, even though it is not above the horizon. A head strap is advisable to keep the glasses from falling into the water.

If the fish are moving upstream, it is well to get ahead of them, or it, and let the target come to you. At other times, you may discover a point of land or a gravel or sandy shoal where the fish pass by; from here you can simply wait them out.

Watch for the telltale sign of the big tail fin cutting the surface of the water. This sometimes shows simply because a carp gets into water that won't cover it completely. At other times, the tail fin will be exposed when the carp noses down in the mud to eat.

When water is still up to the weeds along shore, watch for movement in the weeds. It may only be an old muskrat, a snake or a turtle, but it frequently means carp.

With a boat or a canoe, you have much more mobility.

Since carp are hunted in shallow water, you can take liberties that you certainly shouldn't take over deep or dangerous water. But if you are going to do any standing to shoot, be sure that your companion on the oars or paddle knows his business. Although there is little danger of drowning in such water, hitting a rock can be a painful experience. With your eyes riveted on the most likely spot to find a fish, an underwater obstruction which suddenly stops or jolts your craft may cause a tumble that can take some of your hide at best or break a bone at worst.

Besides, a sharp fishhead on the end of that arrow is still a lethal instrument capable of inflicting serious damage in the event of a fall.

But however or whenever you have the opportunity, going for carp with the bow and arrow represents another way to hunt that measures up well to other facets of the sport. It takes a fishing license to make it legal in Pennsylvania.

When planning an excursion on lakes and rivers where carp abound, keep a rigged bow handy for all-summer shooting.

Just a Little Guy

The opossum is no larger than a honey bee at birth.

The Hotline

A newly-made or fresh scent of a game bird or animal is termed a "hot line" by those who hunt with dogs.



DARREL NULPH, of Bradford, Helen Lewis's late father, proved that factory ammunition will do a fine job on whitetails, dropped seven with seven shots with his 30-40 Krag during his later hunting years.

What Wonder Load?

By Don Lewis

Photos by Helen Lewis

"I WANT THE eye relief of my scope set back just a shade, but that's not the prime reason I'm here," a customer said firmly. "What I want to know is why this spanking new 243 that they claim will sweep the market isn't worth a plugged nickel for chuck shooting when the shots get beyond 225 yards."

"What seems to be wrong?"

"Just won't reach out. I can drop a chuck 50 yards farther with a 222, and yet I'm led to believe this new creation is superior."

"I can assure you the 243 does produce more killing power and offers a longer range, but just saying it's supposed to be better than the 222 Remington leaves room for argument. This would depend on what each is used for under certain conditions. I'm sure the 243 will perform as advertised."

"There is where you're wrong. I've fired over two boxes of ammo with only six chucks to my credit, and not one of them was beyond 200 yards. Doesn't that indicate the 243 might not be what the experts claim?"

"First explain why you missed. I've hunted chucks for a long, long time, and missing shots over 225 yards is not hard to do. What leads you to think it's the cartridge's fault?"

"It takes forever and a day for the bullet to travel to 300 yards. In fact, I can spot the time lapse, and more than once I've seen the dust fly a second after the rifle cracked."

"Now wait a minute. Next you'll be telling me the chucks are catching the slugs and throwing them back. Maybe you're just pulling my leg, but I know for a fact no factory ammo acts in that manner."

"I never said I was using factory



AVID TARGET AND benchrest shooters often use bullet spinners to determine how round, or concentric, a bullet is. End result of such testing is a better load.

fodder. Truth is, an old handloader friend of mine put together some special loads, so I know it's not the shell. But what's more convincing, the old fellow told me confidentially the 243 isn't all it's supposed to be, and, by gollies, I believe him."

It didn't take long for me to find the answer when I read the loading components used. Why I'll never know, but the shells were loaded with a mere 29 grains of 4064 behind a 105-grain bullet. I didn't have a chronograph in those days, but velocity couldn't have been much over 2350 fps. When I pointed this out, my visitor refused to accept my reasoning. He said the old man's theory was a slow bullet would stabilize better. When I suggested a 75-grain hollow point with 40 grains of 4895 that I assured him would put the velocity up over 3250 fps, he was very adamant with his negative answer. No hot load would be fired in his new heavy-barrel Model 70 Winchester.

Not until I showed him that my own 243 varmint loads used this powder weight/bullet combination did he reluctantly allow me to zero in his outfit with the new loads. He took a dozen to try. A few nights later, he was a different hunter with a different theory on what the new 243 would do. He even bragged a little about several 300-yard shots.

Unfortunately, this is not a remote incident that happened only once back in the 1950s. Since then, I've encountered bullet and load problems more times than I care to contemplate. It hasn't always been just in the varmint line, either, and I may as well point out it wasn't always underpowered loads that brought failure. I've seen it in 222s, 300 Savages, 30-30s and the big Magnums where the use of the wrong bullet with a eertain powder charge just wouldn't perform. Also, some hunters are impregnated with the unwise belief that the heavier bullets are always better.

Another false theory stems from trying for super velocity in the hope of increasing the killing power of the bullet. Speed does contribute to the kinetic energy produced by the bullet, but it brings other drawbacks. Going for broke in the speed department reduces barrel life, often detracts from accuracy, and possibly adds an element of danger. I've told before about a Remington M760 that literally froze shut when I fired a round some handloader had concocted by mixing various powder to up the velocity.

The man mentioned in the opening of this article was definitely using a bullet that was too heavy for long-range varmint shooting. Matters were made worse by lowering the velocity in the belief that this would better stabilize the heavy bullet. Some



drop in velocity for heavy projectiles must be accepted, but not that much. Here is where range testing comes into play. Had the old handloader run some tests at 300 yards, he could have seen the folly of his efforts.

One handloader told me he wouldn't use any load not suggested in his manual. There's nothing necessarily wrong with this type of reasoning, but a check through various loading manuals will show distinct variations in load combinations. I've often seen significant differences in suggested powder weights for the same weight bullet. This must not be construed to mean the manuals are wrong or that the handloader is at liberty to disregard the manuals and go out on his own. The suggested powder charges in the manuals come from tests with one rifle. The handloader is using a different rifle and his results may vary considerably. That's why it's best to start low and work up.

The Worth of a Load

Another thing, velocity is not the only factor in determining the worth of a load. The belief that the faster a bullet gets to the target the less chance it will have to get into trouble is wrong. It does take speed to cover long ranges with minimum trajectory, but other things should be considered when choosing a load.

Chamber pressure is unpredictable, especially when powder charges approach maximum. Small differences in loading components can cause pressure variations which can be significant when you're working at high levels to begin with. Contrary to popular belief, a quick rise in chamber pressure doesn't mean an increase in velocity of the bullet. Since chamber pressure is directly related to the individual rifle being fired, there's no ballistic expert around who could accurately predict pressure readings for any powder/bullet combination. The safest route is to stay below maximum loads and use only those that extract easily after being fired.

I have often wondered what should be expected from a good load. Is the handloader concerned only with blazing speed or with just using the heaviest available bullet? What guidelines are used when the supreme load is sought? Now that I've loaded for many years, going through all phases of testing, it's become quite simple. I'm interested in top accuracy from a load having sufficient velocity to do the job. Bullet placement transcends all other factors in most cases.

While most mass-produced bullets are satisfactory for hunting purposes, the handloader with a bullet spinner has a definite edge where precision is necessary. The avid target or benchrest shooter wouldn't be without one, and there's no reason the varmint hunter can't put one to good use. During the years I have used one, I find it more essential all the time, and, in fact, rely on it more and more. For a while I used it exclusively for load testing where all conditions were reasonably well controlled, but now I spin all my varmint hunting bullets and even a few for big game rifles.

The bullet spinner shows on a sensitive dial indicator how round or concentric the bullet is. Measurements

LEWIS CLAIMS this is the "end result of a perfect load," but it's possible that Lady Luck had a little hand in the bagging of this fine buck.



are in tenths of a thousandth of an inch, and top-grade bullets should stay under .0003 (three tenths of one thousandth). It's surprising how many bullets will go over a full one thousandth, and this could explain the "flyer" that widens a group and makes the shooter look bad. A bullet with a sloped or rounded base will give a bad reading. While it might be axially concentric, the uneven base will allow gas pressure to escape prematurely on one side as the bullet leaves the muzzle, causing it to tip or wobble in flight.

To remove only a dozen or so bad bullets from a hundred may not warrant the cost of a bullet spinner, but now I like to know I've eliminated one more possible reason I might miss. I'll go a step farther by saying the longer a spinner is used, the more finicky the handloader will become, not only in selecting his bullets but also in all his loading procedures. The end result is a much better load.

There's not a hunter worth his salt who's never been involved in an argument over bullet expansion. Those who have a favorite brand will defend it to the bitter end. I'm certain every big game hunter wants a bullet that produces the utmost in energy and penetration, and this has led to some strange views and beliefs. I recall loading a box of 30-06s with spitzer point bullets. When the owner came, he was horrified. He claimed the sharp point would zip right through a deer without expanding. He wanted a round nosed bullet that would create more shock. It was close to midnight before opening day, and it was either use them or not hunt. When a 5-point buck walked within 150 yards, he forgot about the sharp point and made a clean kill with plenty of expansion.

DON'T SEARCH for "the wonder load." Instead, settle for a combination that offers accuracy over the ranges you most often shoot. Handloading can help.



Shot at Buck

A hunting buddy of mine shot at a buck at 150 yards. It gave no evidence of being hit. My friend was a good shot, not given to missing standing shots, and he was using his favorite 30-06 load with a 220-grain bullet. Determined to follow in hopes of getting another shot, he picked up the trail and followed it for nearly a half mile before he found he'd fired a fatal shot. The big 220-grain slug hit dead center in the rib cage but did not expand. The entrance and exit holes were nearly the same size.

My friend was lucky that some other hunter didn't get the buck, and he's still wondering if a 150-grain bullet would have done a better job. The lighter weight bullet probably would have opened up quicker. Close examination of the internal damage showed the 220-grain had done little more than just pass through. Still, how do we know another weight or type of bullet would have acted any differently? It would be impossible to duplicate the shot, and the next 220-grain bullet might hit a rib on a different angle and open immediately.

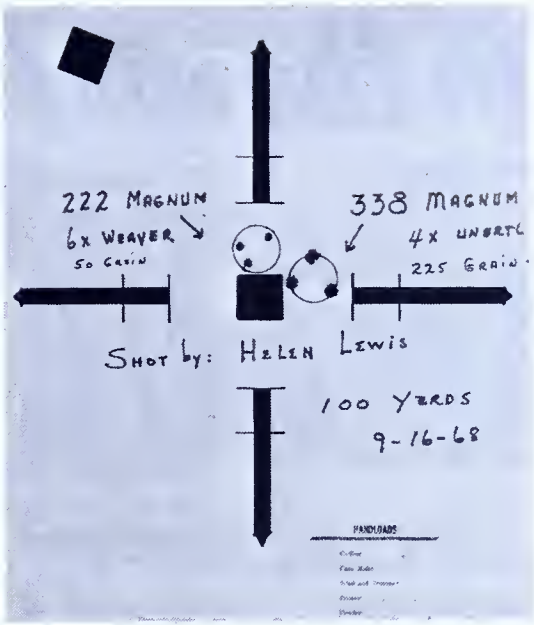
In the varmint hunting line, some strange happenings occur in bullet expansion. The overwhelming belief

that the lightweight bullet disintegrates on contact is not always true. I'm sure for the most part it does, but not always. Once while using a 220 Swift with a 55-grain bullet I toppled a chuck from a slab pile nearly 300 yards away. The bullet went through the chuck's neck and buried itself in a hunk of white oak, still fully clad with its copper jacket.

I didn't have the presence of mind to save the slug, so I'll never know what was inside the copper jacket. Possibly the long distance reduced the velocity to the point that the slug couldn't expand, yet it made a clean kill and penetrated into a piece of slab. Since I've seen similar situations, I can't pass this off as one of those "once in a million" occurrences. I think it does indicate there are many unknowns in the world of ballistics.

Perhaps I could sum up all of this by saying that selecting the proper load depends a lot on likes and dislikes. I've seen hunters search from store to store for one particular brand of ammo while passing up other brands for the same caliber and bullet weight. They believed strongly in just one brand and wouldn't change. Sometimes I think this is carrying a good thing too far, for it vividly shows how much we are influenced by personal whims. I guess they banked their faith on the success achieved during past hunting seasons.

Is there really a wonder load? Is it possible to have a powder weight/bullet combination that guarantees instant success? The inquiries I receive suggest that many hunters think so. As for myself, I've quit searching for the impossible. I settle for a combination that offers the best accuracy at the ranges I may have to shoot. It's still up to me to place the bullet where it will do the most good. If I'm successful on that score, I won't come home empty-handed too many times, and I'll always believe it was more good shooting on my part than having the so-called wonder load.



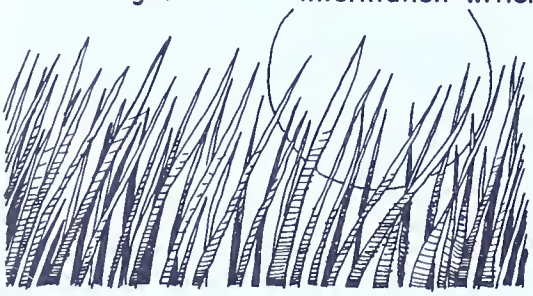
TWO GROUPS SHOT at 100 yards. Calibers were 222 Magnum and 338 Magnum —quite a difference in bullet weight, powder charge and recoil.

More Deer and Hunters, Fewer Accidents

Professor Sidney W. Wilcox of Arizona State University has been compiling national statistics on deer and deer hunters since 1969. His latest report, for the 1973 season, reveals a number of significant trends when compared with the original study. Hunter fatalities from all causes, for example, decreased significantly, from 176 in 1969 to 112 in 1973 even though the number of hunters increased by almost 1.5 million, from 8.2 million to 9.6 million in 1973. During this same 5-year period, the total U.S. deer herd climbed from 13.8 million in 1969 to 14.6 million in 1973.

In the wind

chuck fergus information writer



A 220,000-acre ranch straddling the Rio Grande and stretching into desert highlands has been given to the U. S. Fish and Wildlife Service. Located 65 miles south of Albuquerque, N.M., this tract is the largest ever donated as a wildlife refuge. It is one of the last unspoiled desert grassland and brushland areas in the valley.

The U.S. Forest Service reports discovering three possible alternatives to DDT in controlling tussock moth epidemics. The materials, which are nonpersistent, are a chemical insecticide (carbaryl) and two biological agents (a virus and a bacterium). During tests, carbaryl applied at two pounds per acre reduced tussock moth populations by 95 to 99 percent. However, more research must be done on these controls before they can be used.

—Wildlife Management Institute

New Mexico governor Jerry Apodaca has refused to finance a controversial highway through the rugged Sangre de Cristo Mountains. Apodaca said he could not justify spending any more of the taxpayers' money on a road which would damage the area's wilderness quality, and also cut into the breeding grounds of the elk herd inhabiting the mountains.

—Wildlife Management Institute

Urban sprawl and highways are eating up rich farmlands of the United States which are needed to feed Americans and a famine-threatened world. As suburbs spread out from the cities, farmers are forced to sell their farms and productive croplands are replaced by pavement, housing developments, shopping centers, etc. The value of American farmland has been increasing since World War II as more and more of it disappears. The U. S. Department of Agriculture has announced that the number of American farms had declined 18 per cent during the last ten years.

—National Audubon Society

A comparison of western Aleutian Islands with and without sea otter populations shows that the otters are important in determining the makeup of natural plant and animal communities. Sea otters feed on plant-eating animals such as sea urchins. When sea otters are removed from an area, increased grazing on sea plants by herbivorous animals including urchins occurs. Ultimately, this disrupts other animal and plant populations including lower food chain invertebrates which are important food for larger animals.

—Wildlife Management Institute

The National Wildlife Federation recently announced that it will pay a $500 reward to a Tennessee duck hunting guide for supplying information that led to the conviction of a Memphis physician for killing a southern bald eagle. The reward will go to Frederic Alfred Hamilton, 25, of Union City, who saw a hunter shoot down an eagle from a duck blind at Reelfoot Lake, Tenn. Hamilton gave the U. S. Fish and Wildlife Service a detailed description of the man, his companions, and a pickup truck in which they left the scene.

—National Wildlife Federation

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PHOTO BY KARL MASLOWSKI

Perhaps the brightest songbird in Penn's Woods is the male scarlet tanager. The sight of one of these showy, almost-garish birds in a patch of emerald foliage is always worth a second—and a third—glance. Tanagers are fairly tame, but they spend much of their time in treetops where they often escape the outdoor person's notice. The female tanager is the second half of one of nature's most dramatic color contrasts. She is as drab as the male is gaudy, but her neutral-green coloration protects her while on the nest. Look for the tanagers the next time you're afield: the male won't be tough to spot, but you'll have to look hard to find the female.

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EDITORIAL . . .

A Question of Money?

NEAL KNOX'S ARTICLE IN THIS issue is an excellent exposé of the methods used by anti-gun and anti-hunting groups; summed up in two words, they lie. By pulling statements out of context or deliberately ignoring data which do not support their stand, they present arguments which seem valid to the person who gets all of his information from a single biased source or several sources which have the same goals. The fact that these statements *seem* true does not make them true in an absolute sense; yet in a practical sense the result is the same, for if enough voters believe something they are going to influence their legislators to come up with laws based on the lies with which they've been brainwashed. Thus, propaganda alters reality. It's the old Hitler approach: shout a big lie often enough and loudly enough and a majority will believe you.

That's the way the anti-hunter, anti-gun groups work. The truth doesn't concern them, their only goal is to attain their ends by any means possible. They are making great gains by reaching the 85 percent of our population which doesn't have any great personal interest in the subject one way or the other. They do this by mass media publicity, and they can afford this because they've collected great amounts of money through emotional appeals to that same public, including millions of dollars from the estate of one California man.

Persons who believe in sport hunting and the right to private gun ownership have no choice but to fight these groups—or else give up their rights. A beginning might be made via pro-gun, pro-hunting shorts on radio and television to acquaint the "neutral" majority with the sportsman's side of various pertinent questions. In the end, everything could be a question of money. To fight means more involvement than just buying a hunting license. That is indispensable to proper wildlife management programs, but it has little direct effect in fighting those who will take your guns away. What really is needed is a sportsman-supported national organization which can and will oppose the anti-groups in court. That's where the real battles will be fought, and sportsmen must get the money to make the fight. If each hunting license buyer would contribute a dollar a year, the pro-gunners would have some $20 million annually to work with, and that could make the difference.

At the moment there is no national organization such as is needed, but it has to appear. In the meantime, various state or regional groups are getting organized. One Pennsylvania organization is the National Society for Conservation and Animal Protection (NASCAP), an action group founded by sportsmen who know the true conservationist's viewpoint, the value of sport hunting, the problems resulting from anti-gun propaganda, etc. NASCAP's president is Dr. Walter L. "Lew" Batt, P.O. Box 3129, Bethlehem, Pa. 18017. Contact him for information on this organization and its goals. And let us know if you'd be interested in financially supporting a regional or national pro-gun, pro-genuine conservation group.—*Bob Bell*

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ARLO GREER

What Can I Do This Summer?

By Shirley Grenoble

THE FLUFFY grouse chicks milled about frantically while mama sounded the alarm. I'd surprised the little family on a gorgeous early summer day while I was easing along a small woodland clearing. Mrs. Grouse darted into the woods and began an incessant din.

Taking her word for it that something was wrong, yet too young to recognize me as the enemy, one of the downy poults ran right over my boot in its confusion. They huddled in the weeds not five steps from where I had stopped. For a long time she sounded the alarm. Finally I decided to move on lest she suffer a nervous breakdown.

What a thrill! I'd been privileged to observe these tiny creatures reacting according to God-given instincts. And if someday one of these grouse should fall to my shotgun, well, that would be a part of God's order too!

What was I doing here anyway? Simply taking a summer stroll through some of my favorite hunting territory —a practice I heartily recommend to anyone who feels a kinship with the out of doors. Autumn and winter are for hunting, but spring and summer—they are for enjoying and absorbing.

Like hundreds of thousands of Pennsylvania residents, I'd rather hunt than eat, sleep or almost anything else I can think of. But about the middle of January I hang up the guns and bow and begin to dream of the next season. But there is little hunting between January and September. Pennsylvania's woods offer a jillion thrilling experiences to help fill that gulf. On that thought hinges this article.

First off, there are the obvious things—fishing, berrypicking, birdwatching, hiking, etc. As ardently as I pursue most of these activities, still I cannot long endure without being in the big woods. My observations lead me to believe, though, that most hunters never tramp a foot on a forest trail outside the hunting season. What a waste!

Hiking is a great sport, invigorating and challenging. But the kind of walking I am suggesting is as far removed from hiking as it is possible to get. It's the pace of a stillhunter; a few quiet steps, then a pause to carefully survey your surroundings. It's a matter of melting into your environment and letting nature's drama just unfold around you.

Hiking benefits the body; a quiet walk benefits the soul. Our stealth in the woods will reward us with many a sight that will tingle our memories in future days.

One Drizzly August Day

I remember one drizzly August day particularly. I had just started down an old logging road when I spotted four black spots about 50 yards ahead. It was difficult to see through the mist so I sat down in a clump of drippy brush to study them through my binoculars. I was puzzled, until one of the spots moved slightly. Then I was electrified! I was looking at four gobblers with wings spread like huge umbrellas and heads tucked under—their way of shedding the rain. I sat frozen, not daring to even wipe away the drips that were coming in a direct line from the overhanging brush to my face. I knew these birds would flee like ghosts if they detected the slightest glimmer of movement that would betray my presence.

After about 15 minutes, as if on cue, they stirred. One by one they shook themselves and began moving slowly down the trail. I skirted the edge of the trail, staying close to the brush, and was able to follow them

about 100 yards. Then they cut into the woods and disappeared into the mist. I just stood quite still for a moment. I felt a sense of gratitude wash over me for having been treated to such a rare sight.

When I got my feet moving again, I walked another half-mile to a small clearing about one-half acre in size. It is surrounded by spruce and pine trees. To the east is an old apple orchard, planted by miners at the turn of the century but long since abandoned and overgrown. One of the spruce trees on the edge of the field boasts branches which dip to the ground. I like to crawl behind these branches and settle down with my back against the trunk as I did that summer evening. I can see pretty well through the branches and it makes a perfect spot for watching and waiting.

Gobblers Again

Just a short time after settling in there, I spotted a glimpse of movement, then another and another. It was the gobblers again. I was treated to another hour-long show as they fed and preened and "talked." Then they drifted off into the woods toward the orchard. I felt they would probably roost nearby. I was so thankful that I hadn't let a little rain keep me from my "appointed rounds" that day.

The turkeys were scarcely out of sight when a spike buck with antlers in velvet entered the field just to the left of my tree. He wasn't 10 yards away and I thought surely he'd scent me any minute and be off in a flash. Instead, he began to nip at the grass and feed leisurely toward my tree. But the closer he got, the harder I shook, until I thought certainly the whole tree must be trembling. He kept coming until he was directly in front of me. Only a few spruce limbs separated us. I could see his eyes blinking and hear his breathing. How could he not hear my heart thumping? How could he not see the form only a foot in front of him shaking like a leaf in a tornado? I'll never know how a deer could be that close and not smell me.

Then, incredibly, he stuck his head in amongst the branches to pull at some grass at my feet. His nose bumped my boot! That did it. I could stand it no longer. Ever so softly I said, "Boo." He swapped ends and tore out of the field like his tail was on fire. I really hoped this experience had left him somewhat wiser.

After he was gone I sat there till dark, savoring the summer sounds and smells. To move would have been to break the spell. What an incredible day it had been.



AFTER AWHILE both beavers swam into the backwater just below us. As they worked they made loud gutteral noises, obviously some sort of communication. It was something not many people have heard.

This all took place within a mile of a number of cabins where folks were "camped" for the weekend. Any one of them could have been down the trail that afternoon and seen what I'd seen. "But after all," an acquaintance once told me, "I can't see why anyone would want to be in the woods in the summer."

Summer has much to please the esthetic nature that can be seen at no other time of year. It is one thing to ride along a dusty road viewing the mountain laurel in bloom. It is another thing to park the car and walk to a ridge completely swathed in laurel blooms as far as you can see, to realize that this beauty is here for you alone, for no one else will come here to see it. It makes you aware of something beyond yourself.

I know another place, settled and abandoned by miners over 75 years ago. It takes two hours to walk there over a rugged trail. But if the breeze is right, your efforts are rewarded about a quarter-mile before you get there. The aroma drifts toward you in little wisps. It gets stronger with each step, teasing you to quicken your pace. When you at last break out of the woods into the tiny clearing you feel as if you are drowning in fragrance. There it is. A gigantic lilac bush. It is regal, truly awe-inspiring. As tall and broad as a small house and gloriously set near an old mountain pond, its branches now spread protectively over a crumbling stone foundation. Its utter beauty never fails to provoke a response of wonder within me. And I alone have come to enjoy it.

Summer is the time to explore new country. Get a topographic map and a compass. Be sure you know how to use both. Then you will be able to search out a trail, a ridge, a valley, a mountain top you haven't been on before. This is the time to discover whether these places hold any promise for the upcoming hunting season.

Another appealing feature of summertime is that there is none of the pressure that hunting season can bring, the idea that we must get a deer or keep going until we locate that flock of turkeys. You can relax and glide around at your own pace. In fact, if you are out in the heat of the day you must be careful to pace yourself or risk heat exhaustion. Besides, it is usually when you stop to rest that things begin to unfold.

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For instance, one May morning before Pennsylvania had a spring gobbler season, I was ambling around a favorite wooded basin and I sat down to rest with my back against a tree. Suddenly a series of shrill screeches split the silence. My skin prickled. I hadn't the faintest notion what I was hearing. So I sat very still, waiting. Soon I heard a whirr of wings and a pileated woodpecker landed on the tree directly across from me. She poked her head in a hole in the trunk and three screaming babies poked their heads out. She made countless trips with food for her youngsters and they screeched endlessly throughout. What an unforgettable sight—and sound!

What Kind of Gear?

What kind of gear do you need for summer walking? Well, I wear leather hiking boots with cotton or wool socks and lightweight camouflage clothes with the pant legs worn outside the boots; this gives protection against snakebite. I have a cotton (not plastic or vinyl, they are too hot for summer) vest with four deep side pockets and a game pouch in the back. I put the topographic map and compass, a small lunch and a sweater in back of the vest. I also carry a large plastic bag, folded compactly. If it rains, I just sit down, pull the bag over me, poke out a couple air holes, and wait it out. When the rain is over,



ONE DAY WE SAW a black bear in the old orchard. He would stand on his hind legs, shake down the apples, and then munch till they were gone.

I shake out the bag, fold it up again and continue on my way. I carry a snakebite kit, deer scent (to cover my own scent if I want it), an old thin scarf to rip into strips to use as markers if I should need them. I take a mesh headnet for those times when bugs are bad.

These are all lightweight items. Each person will no doubt have personal choices of gear to take. I carry lightweight binoculars on a piece of elastic around my neck. That way they do not bounce but can easily be brought up to eye level.

I also carry a 22 pistol. If I should get hurt or lost (I never have yet) I can signal with it. A couple times I've had close scrapes with rattlesnakes and I used the pistol to dispatch them.

You are doubly blessed if you have a friend and kindred spirit, as I have, to go with you on these woodland wanderings. Experiences shared are somehow more meaningful. Eleanor and Harold Campbell, who own the skating rink in Sayre, have a cabin on Barclay which we often use as a "base of operations." Eleanor and I are most compatible in our outdoor ramblings. We often walk together in the woods for miles, never speaking a word. Sometimes we split up, to meet at some prearranged point a few hours later.

Once, on a spring afternoon, we walked several miles up Schrader Creek Road. While I did some fishing she explored the mountainside. On our way back we stopped to admire a beaver dam, new to the area. Since fresh beaver sign was abundant, we decided to hide ourselves and wait to see if we could observe the beavers at work.

Communication

Before long the water rippled and two beavers surfaced. We sat in the high grass and watched them swimming back and forth with branches in their mouths. After awhile they both swam into a backwater just below us! As they worked they made loud, gutteral noises, obviously some sort of communication.

The sight was so entrancing we left only when it got so dark we couldn't see. Since we had thought beavers to be silent animals, we wondered at the noises we'd heard them make. At home, we looked up all we could find about beavers. In his book, *Complete Field Guide to American Wildlife*, Henry Hill Collins, Jr., says that beavers make vocal sounds but *only in their lodge*. So what did we hear? I still don't know for sure but obviously it was something not too many people have heard. Another remarkable day.

One Sunday afternoon in September, Eleanor and I were strolling in the old orchard. I caught a glimpse of movement. It was a black bear! We were so excited about having a bear in front of us that we dropped to our hands and knees and crept toward him so as to get a better look.

When we had closed the gap to about 30 yards, we lay down on our stomachs in the high grass and just watched the show. He would stand on hind legs, grab a branch and shake down the apples, then drop to the ground and munch till they were gone. And then he'd repeat the performance. When he had his fill he meandered off into the woods. I wondered where he'd be come hunting season.

Spring and summer is a wonderful time for photography. You can observe and photograph (not disturb) nature's families fairly easily. Pictures of your favorite places are priceless. They will help you recall many private memories. Especially if the time should ever come, for whatever reason, that you can't travel to those spots again.

Much of Pennsylavnia's woods has a fascinating history and exploring it is great fun. State Game Lands 12 in Bradford County, where I do most of my hunting, was once heavily strip-mined and lumbered. Now the forest is dotted with old foundations, stone walls and wells. The mountains are laced with old logging roads, railroad beds and switchbacks that make for endless miles of good walking. Yet you are deep in the woods to enjoy and absorb. It is fun and educational to find old bottles, pieces of pottery, tools, barbed wire, etc., that belonged to people who lived here half a century ago.

Once Eleanor and I read an article about predator calling. We got a couple of fox calls and set out. No one was more surprised than we when we actually called up a fox! If we can do it with $2.98 calls, anyone can.

Of course, no one can guarantee that every time you step into the woods something exciting will happen. Like most, I have been afield many times when I never saw anything unusual. But then, excitement is a relative thing. It is, like beauty, in the eye of the beholder.

There are times of intense excitement, as with the gobblers and the spike buck. There are times of quiet appreciation, as per the laurel and the lilac bush. There are times of amusement, as when I watched eight raccoons make a shambles of a blueberry patch as they gorged themselves. There are times of incredible sadness, such as I felt when I once watched an ant and a small green worm battle to the death. As I watched the victor struggling to drag its limp, green victim to its nest, I waxed philosophically to myself about the struggle for survival in which every species of God's creation finds itself engaged.

Then there is . . . Well, I've got to stop! Yet I've hardly scratched the surface of all there is to experience and see and enjoy and absorb in Pennsylvania's Woods. Why not try it yourself this summer?

Penn State Archery Program

The Pennsylvania State University's College of Health, Physical Education, and Recreation is offering a summer archery program for individuals who intend to teach archery in schools, colleges, camps, community agencies, and archery clubs. It will be held at the University's Stone Valley Recreation Area, August 9-17, 1975. Applications must be received by July 20.

Cost of the courses: Instructors Course, $150 (nine days); Coaches Seminar, $90 (five days); and Shooters School $90 (five days). Registration fees include room (four-man wall tents with concrete platforms), board, instruction, use of equipment and text materials. Applications and checks—payable to Pennsylvania State University—may be mailed to Pennsylvania State University, Continuing Education, 309 Shields Bldg., University Park, Pa. 16802.

It's Not Every Day that a Squirrel Hunter Goes . . .

Six for Five

By Tom Fegely

EXCEPT FOR the convincing gold of the hickories, tulip-poplars and maples, one could have mistaken the mid-October weather for that of early June. Before leaving for school I'd tossed my red vest, flannel shirt, canvas pants and 22 rifle into the back of the station wagon. The Saturday "early squirrel" opener had caught me with other plans and my annual woodlot inaugural had to be postponed until Monday afternoon.

Although grouse can be found in some places in the Lehigh Valley they are at a premium. Therefore, most gunners concentrate on squirrels to counteract their early season itch.

I'd figured on having a full two hours to hunt, but a forgotten faculty meeting gobbled up 45 minutes and the trip from Emmaus, where I teach ecology, to my parents' home in Limeport another 10. That left me with just over an hour to change clothes, complete the five-minute walk to the old, familiar woodlot, and hunt.

I'd hunted this particular patch of woods ever since my first season. Except for a few new paths created by noisy mini-bikes and their youthful riders, the woodlot's personality had changed little over two decades.

Like an easy chair especially designed for a squirrel hunter's back, the giant tulip-poplar had also changed little. Where its trunk widened into an underground thoroughfare of roots, it formed a cradle with a 75-foot-high backrest. Recently, though, a beech tree had also taken hold, entwining its own flimsy roots about those of the elder poplar and offering perfect concealment when maneuvering for shots to the rear—toward the stream.

I'd hardly gotten time to clear the leaves away from the base of my "sittin' tree" when a scratching sound drew my attention to the old white oak about 40 yards away at the edge of the woods. I strained to find movement but whatever made the sound was nowhere to be seen. I slowly scanned the leafy ceiling of the rest of the woods without fully taking my eyes off the oaken "squirrel factory."

Whenever I came to the woods I always sat facing the oak. From experience I knew that this tree alone would account for a full bag of grays before season's end. At least it always had in the past.

Although still tall, stout and sturdy, storms and disease had taken their toll and each year found another limb or two littering the floor beneath its outstretched branches. But this, I knew, meant more den holes and more places for birds and squirrels to find refuge.

The scratching sound again drew my attention to the tree. This time I spotted its maker spiraling down the trunk toward the ground. I leveled the 4x scope at the place I figured he'd appear in his circular descent. My calculation was right and a clean

When The Red Gods Smiled

head shot claimed my first score of the new season.

All was quiet for the next quarter hour—except for the other wildlife not yet accustomed to the intrusion of fall hunters. From the adjacent cornfield two ringnecks called and a lone crow announced his presence at the other end of the woods. A curious chipmunk perched on a nearby rock and stared at me, probably wondering what sort of strange creature this was in *his* woodlot. I stared back until he finally turned and disappeared beneath a fallen log.

Unlike the bonus squirrel season after Christmas, when snow covers the woods and the absence of leaves in the undergrowth provides good visibility, the early fall season still finds fragrant yellow spicebush leaves blocking the ground-level view. Along with the viburnums and other low-growing shrubs and trees, open space is limited to the treetops. And even there squirrels have plenty of room to hide, especially if fall frosts have yet to sever the pastel leaves from their twigs.

My mind drifted off once more to thoughts of past hunts at this very spot. The one universal appeal of squirrel hunting is that it offers time to watch and think without too much concentration on the quarry. As long as a hunter sits still and makes no unnecessary noise, sooner or later Mr. Bushytail will make his move and bring you back to the present. The colors and smells of a day—or hour—afield are well worthwhile, no matter how few shots are taken.

I glanced at my watch. Another half hour and I'd have to leave for home.

I surveyed the big oak once more. The late afternoon sun cast an orange glow over the trunk and outstretched limbs which the squirrels used as freeways and spur routes to the surrounding trees. The heaviest branch of the tree poked out at a right angle about 20 feet above the ground. Although all was quiet, an odd "lump" midway out on the limb caught my eye.



WHENEVER FEGELY came to the woods he sat facing the oak. He knew this tree would account for a full bag of grays before season's end—but this day he got more than expected!

With elbows resting on my knees, I centered the crosshairs on the peculiar shape. Just as I thought—a big gray was stretched on the hefty limb, only its head and the peculiar curl of its tail giving away its location.

The shot would have been tight so I decided to wait him out. In a matter of seconds he straightened up and gazed in my direction. Another head shot dropped him. Two for two; not bad for openers, I thought.

I always make it a point not to retrieve my kills until I'm ready to leave the woods. A squirrel will not be as frightened by the short-lived crack of a rifle as it will by the sight and sound of a moving human. If the squirrel is only wounded, however, I'll sacrifice my place at the sittin' tree to retrieve it. This time the accuracy of my scoped Mossberg assured me I could stay put.



GROUSE CAN BE found in some places in the Lehigh Valley during the early season, but most gunners concentrate on squirrels, which are easier to find.

A few minutes later my thoughts were again interrupted by movements in the oak's leafy canopy. Although I couldn't see the squirrel, the thrashing leaves led me to believe it would be in sight any second. I waited for several minutes before finally catching a quick glimpse of him. The thrashing continued, first near the topmost part of the tree then out on the edge and back once more. Finally a form materialized from the vegetation and silhouetted itself against the highest visible part of the trunk. I once more centered on the head and calmly squeezed the trigger.

At the crack of the rifle the squirrel disappeared. I bolted another shell into the chamber and again squinted through the scope. There he was—plastered against the opposite side of the trunk. He was partially hidden by the curvature of the tree and, although his tail twitched occasionally, I had difficulty focusing on his head.

Knowing that the tree was pockmarked with numerous holes in which the squirrel could readily take refuge, I decided to take a chance on testing his curiosity. Often, when watching or photographing birds, I'll purse my lips against my teeth and make a squeaking noise by forcing air through them. This tends to arouse an animal's curiosity.

It worked! As soon as I "squeaked" the squirrel raised its head and a third bushytail dropped to the leaf-strewn woodlot floor. Three for four—still not bad, I figured.

I waited another 10 minutes before rising to stretch my stiffened legs. The sun had dropped lower in the western sky and visibility in that direction was blinding. I concentrated my gaze in the opposite direction, hoping to find movement in the lower branches of a hickory that had yielded some fat grays in seasons past. A nuthatch worked its way down the grizzled trunk, pausing occasionally to right itself and pick off some tiny insect. Other than that, all was still.

I shifted my gaze back to the old white oak just in time to see not one but three squirrels disappear into the topmost foliage. In two or three weeks I'd be able to pick them out at this distance, but now all I could see were bobbing branches as they jumped from place to place.

I patiently waited for one to show itself, but to no avail. They were evidently feeding on acorns that still hadn't fallen or been cut.

Since quitting time was drawing near, I decided to try to get closer to the tree. A different angle of view, I hoped, would afford me a better view and the possibility of getting shooting at one or two. Although my squirrel hunting jaunts seldom include carrying a shotgun, one would have better served my purpose now.

Although none of the grays seemed aware of my presence, I was extra cautious in taking my first step. Whenever the kids and their minibikes disturbed a wildlife photo session I silently cursed them, their loud machines and the parents who bought them. Now, though, the well-worn trail provided me with an unobstructed path to within the radius of the giant oak.

But I never made it that far. Now, not three but four squirrels sprang from the treetop—quarreling and chasing one another across the tangles of branches. Occasionally one clung monkey-style to the outermost part of a limb, riding it down with its own weight then jumping to another as it sprang back again.

Rifle raised, I waited for one of the moving targets to pause long enough for me to draw a bead. Finally, two of the acrobats headed toward the jagged arm of a once-mighty limb that now jutted out only a foot or so from the main trunk. They stopped side by side, peering in opposite directions. Well aware that something was amiss yet not quite sure just what, both squirrels froze except for uncontrollably nervous tails.

I leveled on the brown-tinged head of the closest one and squeezed—not quite sure myself of the effect a pounding heart would have on my accuracy. But today luck was with me. The squirrel dropped off the opposite side of the limb. The second squirrel, however, grasped the same side past which the other one fell. Only his quivering tail was visible.

I figured the one I shot knocked this one off balance and in the confusion he decided to stay put. With two more to go for my limit, I cautiously hurried up the rutted path in hope of getting a different angle for a clear shot.

I'd only taken a few steps when the squirrel lost its grip and fell about a dozen feet to another clump of branches. Its tail wildly gyrating, the squirrel once again lost its hold and dropped to the ground—dead! The shot had evidently passed through the first squirrel and mushroomed into the second. Two squirrels with one shot! In all my years of squirrel hunting, this was a first. I'd downed two ringnecks and two quail on single shots before, but that was understandable with a shotgun's large pattern.

A CURIOUS CHIPMUNK perched on a rock near Fegely, probably wondering what sort of strange creature this was in his woodlot.



Reclaimed Miss

"Five shots and five squirrels," I muttered as I approached the old tree. "Not everybody can reclaim a miss."

But the afternoon's bag of surprises wasn't fully opened yet. For in the brown and yellow carpet of leaves lay not five but six fat gray squirrels. I thought at first one might have already been dead, seriously wounded by an earlier gunner, but all six were warm and limber.

My third and fourth shots had obviously been at two different animals. When the first was hit it had dropped in back of the tree, away from my view. A second one which I hadn't seen then flattened itself against the trunk as squirrels typically do. Not knowing where I was, it too opened itself to my sights when I "squeaked" to arouse its curiosity.

"Not a bad hour's work," I thought, as I stuffed the six grays into my game bag. Never before had I taken the limit in so short a time, from the same tree and with so few shots.

This fall, when my back once again nestles into the fold of the sittin' tree, I know which chapter I'll be reviewing in my unwritten book of memories. It will be the one titled "Six For Five," undoubtedly the high point of my days in the squirrel woods—one of those days when the Red Gods smiled.

Gun Laws Don't Reduce Crime

By Neal Knox
Editor, *Handloader & Rifle* Magazines
Prescott, Arizona

MUCH HAS BEEN said in recent years about "the need for gun laws to reduce crime." But those who have been saying it have yet to cite a city or state which has reduced crime by the passage of a gun law—and some 20,000 gun laws, of all degrees of restriction, are in existence in this country. It would seem that the proponents would study these various laws, or those which have been enacted in the past decade, determine which has resulted in a decrease in the crime rates, and push for enactment of a federal law of the same type. But they do not, for they cannot find a law that works.[1]

Lacking evidence that gun laws reduce crime, they present statistics which make it appear that the laws reduce crime. For instance a recent Reader's Digest article, advocating "gun control," gave only two examples of "successful" gun laws—in Philadelphia and Toledo.[2] It noted that "almost 200" convicted felons, addicts and mental incompetents had been denied a gun license in the first year of the Philadelphia law. But in 1964, the year before Philadelphia's law went into effect, the city's murder rate was 5.4 per 100,000 residents; by 1973 the rate had climbed to 11.5, according to the FBI Crime Reports. Similarly, in those years Philadelphia's robbery rate rose from 75.2 to 232.6 per 100,000 residents. In both categories, the Philadelphia crime rise exceeded the U.S. increase, though the remainder of the nation didn't have such an "effective" law.

Toledo's law was enacted in 1968 and, Reader's Digest said, "by 1970 its yearly handgun murder rate had dropped 22 percentage points." That's deceptive, for murder rates are calculated on the number of murders per 100,000 residents, not in percentages. Presumably the writer meant that a smaller percentage of all murders was committed with handguns; but if the percentage of murders with handguns went down, the number of murders with handguns did not: In 1968 there were 28 murders in Toledo; in 1970 there were 36; and in 1973, the latest year for which statistics are available, there were 62 murders.[3] How can anyone look at such an increase and claim that the Toledo law has been successful?

This article is reprinted from the May-June 1975 issue of RIFLE Magazine (P.O. Box 30-30, Prescott, Ariz. 86301) and is used with permission.

(1)—Several studies have purported to show that restrictive gun laws can reduce crime, but none have stood the test of time. For instance, Martin Geisel, et al, in a statistical study based on 1960 to 1965 crime statistics and published in the **Duke Law Journal** estimated that a firearms owner license law such as enacted in 1966 by New Jersey would "save between 21 and 32 lives per million population per year." In fact, the New Jersey murder rate rose from 3.5 per 100,000 in 1966 to 7.4 in 1973, almost identical to the rise (3.2 to 6.3) in neighboring Pennsylvania, which does not have such a law. The Violence Commission staff found that areas with larger percentages of firearms ownership had a larger percentage of violence committed with firearms, but not necessarily more total violence. However, Prof. Franklin Zimring of the University of Chicago, one of the co-authors of the Violence Commission study, questioned the validity of his earlier findings in a study "Firearms and the Federal Law: The Gun Control Act of 1968" published in

Reader's Digest, which claims to have "some 20 editorial researchers who check, double-check and then check again every comma, word and fact in every issue," stated there are "27,000 fatal gun accidents" per year. The correct figure is about 2,600, according to the National Safety Council.

The Reader's Digest article also stated: "A gun kept by a civilian for protection is six times more likely to kill a family member or friend than an intruder or attacker." That's probably true, for how often is it necessary to kill an intruder? By comparing the rarity of actually killing an intruder to the number of intra-family murders and home accidents, it's simple to come up with yet another misleading statistic.

A far more significant study is the reduced numbers of robberies which occur in areas where criminals are aware that the proposed victim is likely to have the means of defending himself. After police trained some 6,000 Orlando, Fla., women in self-defense with firearms, the rape rate was cut in half. Further, there was a decline in both robberies and burglaries—the types of offenses most affected by an armed citizenry. That year Orlando was the only major city to show an overall crime decrease.[4] Store holdups in Highland Park, Mich., dropped from 1.5 per day to no robberies for four months after police began a well-publicized firearms training class for merchants.[5] In neither city did those trained citizens kill an attacker, or, so far as is known, even display their guns in warding off a robbery or assault.

In 1973, 20 percent of all the murders in the nation occurred in just four cities: Chicago, Detroit, New York City and Washington, D.C.,[6] all of which have extremely restrictive gun registration and licensing laws. But the advocates of such laws contend the laws don't work in those cities because: (1) the laws aren't strong enough and (2) "weak" laws in surrounding areas make the strong laws easy to circumvent.

But no law could be "stronger" than New York City's, where virtual handgun prohibition exists—in April 1971 there were only 564 handguns licensed to persons not involved in law enforcement.[7] Yet despite the most restrictive law in the nation,

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January 1975. He wrote: "The sharp rise in the proportion of violence attributable to handguns in northeastern cities (in the past ten years) may lead to modification of the hypothesis that general patterns of handgun ownership determine the extent to which handguns are used in violent episodes." After commenting that general ownership of firearms may have increased in those areas, he stated "It is more likely that handgun ownership increased substantially among subcultural groups disproportionately associated with violence. . . ." Though Prof. Zimring remains much in favor of extremely restrictive gun laws, he seems to be saying the same thing that we have said: criminals disobey gun laws. His findings are essentially the same as ours; we differ as to the solution.

(2)—"Safer With A Gun?" by Stephen Oberbeck, **Reader's Digest,** Feb. 1975, condensed from **Good Housekeeping.**

(3)—Source: FBI Uniform Crime Reports. The Toledo murder rate in 1968 was 4.1 per 100,000; in 1970, 5.2; in 1973, 8.0. Though there may have been a temporary decline in the percentage of murders committed with firearms, we doubt that it was permanent. No such figures are available from the FBI.

(4)—Source: FBI Reports, 1966, 1967. The training classes were held from September 1966 to May 1967. In the first quarter of 1967 there were three forcible rapes, compared to 33 in the same period in 1966; for the year the rate dropped from 17.1 to 8.1.

(5)—Source: Telephone conversation between the writer and Highland Park Police Chief William Stephens, September 1967.

(6)—Source: FBI Reports, 1973. Chicago, 1,003 murders; Detroit, 861; New York City, 1,741; Washington, D.C., 399: Total 4,004, or 20.5% of the 19,509 murders in the U.S. All four cities require handgun purchase permits and registration; New York City requires licensing of individual guns.

(7)—Letter to the writer, dated April 16, 1971, from Wilfred N. Horne, Deputy Commissioner, Press Relations, New York

in 1973 there were almost twice as many murders with handguns and more than four times as many robberies with handguns as in the remainder of the nation on a per capita basis.[8]

During the recent House hearings on firearms laws, the high crime rates in both New York City and Detroit were blamed on Ohio and other states with minimal gun laws. But Ohio has far lower robbery and murder rates than either of the complaining states.[9] If the assumption were correct that gun availability causes or contributes to crime, such crimes should be highest where guns are most available, but studies have shown that "there is no statistically significant difference in crime rates between states that have firearms licensing laws and those that do not."[10]

Undaunted by the failure of gun laws to reduce crime in the U.S., the gun prohibitionists point to the restrictive gun laws and low crime rates of Japan and other selected foreign nations—totally disregarding the immense cultural differences that exist between nations. Handgun murders are extremely rare in Japan, where handguns are banned; however, murders with any weapon are rare in Japan. Yet, Japanese in Tokyo commit more than twice as many murders as Japanese-Americans in the U.S.[11]

Japanese-Americans are arrested for murder in the U.S. less often than any other ethnic group identified by the FBI Crime Reports, on a per capita basis. In 1973, the murder arrest rate for Japanese-Americans was 0.7 per 100,000 population; for Chinese-Americans the rate was 5.7; for American Indians, 21.0; for Blacks, 46.6; for Whites and "All

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City Police Department: "At the present time we have 24,354 pistol licenses in force, of which 564 are issued to persons who do not require them as a condition of employment."

(8)—Source: **Report of the New York State Commission of Investigation Concerning the Availability, Illegal Possession and Use of Handguns in New York State (1974).** It states there were "20,422 handgun robberies" and 795 homicides with handguns in New York City in 1973. This is a handgun robbery rate of 258.7 per 100,000 residents; a handgun murder rate of 8.0 per 100,000. Though no exact figures are available for the U.S., surveys indicate that the handgun robbery rate excluding New York City is, at most, 61.7 per 100,000. The FBI Reports state that there were about 10,340 handgun murders in the U.S. in 1973, so the national handgun murder rate outside New York City is about 4.8 per 100,000.

(9)—The witnesses contended that Ohio and South Carolina were principal sources of guns smuggled (in violation of the 1968 Gun Control Act and other laws) into New York and Michigan. The following table shows the robbery and murder rates for each area, according to the 1973 FBI Report:

	Murder	Robbery
Ohio	7.3	143.5
South Carolina	14.4	79.2
Michigan	12.1	282.7
Detroit	19.3	470.3
New York	11.1	439.6
New York City	17.5	747.0

(10)—Source: "The Relationship Between Firearms Licensing Laws and Crime Rates," Alan S. Krug, Regional Analysis Center, Pennsylvania State University. Reprinted in the **Congressional Record,** July 25, 1967. The study was a statistical updating of a 1960 study, "The Regulation of Firearms By The States," prepared by the Wisconsin Legislative Reference Library. The Wisconsin study found: "From the foregoing statistics it would be difficult to determine the effect that either licensing or non-licensing of firearms has on the extent of crime in a state, particularly the murder rate."

(11)—Handguns are prohibited in Japan to all except the military, police, ballistics researchers and active target shooters (substantially the same as in New York City, see Note 7). According to an article in the Oct. 2, 1971 **New York Times,** "Crime in Tokyo a Minor Problem" by Richard Halloran, there were 213 murders, only three with handguns, in Tokyo in 1970, for a murder rate of 1.9 per 100,000. The U.S. murder arrest rate for Japanese-Americans in 1973, and the five-year average for 1969-73, was 0.7 per 100,000 (see Note 10); since the FBI reports an average of 83.4% of murders cleared by arrest during that period, the average annual rate for murders committed by Japanese-Americans in 1969-73 was about 0.8 per 100,000, or less than one-half the 1970 rate in Tokyo.

Others," the rate was 4.2. The figures are quite consistent from year to year.[12]

At one time the "gun-controllers" contended that the intended purpose of gun laws was to "keep guns out of the hands of criminals." But since the U.S. Supreme Court held in 1968 that criminals cannot be forced to register illegally possessed guns, due to the Fifth Amendment protection against forced self-incrimination,[13] many have admitted that their aim is to reduce guns in the hands of the general public, "because most murders are committed by normally law-abiding citizens during a moment of anger."

That allegation is demonstrably untrue. The head of the Michigan State Police, Col. John R. Plants, has stated that less than one one-hundredth of one percent of the guns used in Michigan crime have been registered as required by Michigan law.[14] Of the 185 handgun murders in Washington, D.C., in 1973 the guns used were recovered in only 84 cases; only 16 had been registered.[15] According to the New York City Police Department, "No homicides were committed by persons using legally licensed firearms (in 1970)."[16]



PGC Photo by Joe Osman

ONLY SPORTSMEN would be hurt by anti-gun laws, for criminals simply wouldn't obey them any more than they obey any other law or regulation.

(12)—The FBI Crime Report does not publish the murder arrest rate, but it does publish the number of persons arrested for murder in six ethnic groups. The number of persons arrested in each listed group (extended from the population of reporting areas to the U.S. population) was compared to the 1970 census of each group, providing an accurate murder arrest rate for each. For purposes of calculation the number of arrested persons in the "All Other" category was added to "White"; census totals for the llsted groups were subtracted from the U.S. total population to determine the population base for "White" and "All Other." The murder arrest rates for 1972 are quite similar to 1973: Japanese, .9; Chinese, 4.3; Indian, 18.7; Negro, 49.8; White and All Other, 4.0.

(13)—**U.S. vs. Haynes**, 1968. The Supreme Court held that fear of self-incrimination was a proper defense for failure to register a sawed-off shotgun, since registration under the National Firearms Act of 1935 would amount to admitting violation of provisions of the law which make it illegal to either make or obtain such a weapon. As a result of this decision, the law was amended to provide that information obtained as a result of a registration application could not be used for prosecution. The decision resulted in an even more peculiar feature in the Chicago firearms registration law, which was enacted a day after the decision was published. Under the Chicago law, convicted felons, narcotics addicts, persons with mental disturbances and other categories prohibited by Illinois law from possessing firearms are "ineligible" to register guns. As a result, law-abiding citizens may be prosecuted for possessing an unregistered gun but a convicted felon may not be.

Since the overwhelming majority of murders in Detroit, D.C., and New York City are committed with illegal guns, it's apparent that the murderers paid no more attention to "Thou shalt not have an unlicensed/unregistered gun" than they did to the far-stronger injunction "Thou shalt not kill."

Although the proponents contend that restrictive or prohibitive laws will not adversely affect law-abiding citizens, such claims are entirely false. Completely disregarding the cost to gun owners of license fees, time lost from work, photographs, physicians' statements and other requirements of proposed licensing and registration programs, the cost to the general public would be horrendous. Direct costs to the City of New York for investigating and processing a pistol license application were estimated at $72.87 in a study prepared for the Violence Commission in 1968.[17] In mid-1970's dollars that's more than $100 per gun, and since there are an estimated 40 to 50 million gun owners, the total cost would be $4 billion to $5 billion —not including the cost of setting up and operating a computer system second only to the Social Security system. The indirect cost includes the loss of services of countless police officers who would be forced to spend their time investigating law-abiding gun license applicants rather than criminals.

By comparison, prohibition is cheaper. At an average fair market value of $50, which seems conservative, the government could purchase the estimated 40 million handguns in the country for "only" $2 billion —not counting the cost of the purchasing staff and destruction system. To pay less than fair market value would be an unconstitutional seizure of property without just compensation.

But the highest price the nation would pay would be the immediate conversion of countless normally law-abiding citizens into law-violators who by oversight or intent refused to turn in their handguns, creating a multitude of scofflaws unequaled since the prohibition of alcohol.

Considering the awesome cost of such so-called gun control, the taxpaying citizen must demand irrefutable evidence that the proposed laws will have the desired effect of reducing crime. The proponents have produced no such evidence.

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(14)—Source: "Handgun Ban Hit As Murder Cure," Thomas L. Washington, **Detroit News,** June 20, 1974. (Page 7-B)

(15)—Source: "Gun Control Bill Sent to D.C. Council," LaBarbara Bowman, **Washington Post,** Feb. 12, 1975. (Page A-32)

(16)—Source: Letter from Horne, NYPD. See Note 7.

(17)—Source: "A Preliminary Cost Analysis of Firearms Control Programs," prepared for National Commission on the Causes and Prevention of Violence Research Associates, Incorporated (D.C.). The report concludes: "Some of the programs discussed were quite high in cost. The question as to what public benefit would result from them remains, to a large degree, unanswered. Before such programs are adopted, realistic objectives should be clearly defined and unbiased analyses performed to determine their effectiveness and costs in accomplishing these objectives."

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Sharp Incisors

The generic name of the wood rat is *Neotoma*, a Greek word meaning "new cut" and referring to the sharp cutting teeth of this rodent.

Sort of a Super Species . . .

SASSAFRAS

By Franz L. Pogge

I FIRST GOT INTERESTED in sassafras while watching cottontail rabbits at the Buckaloons Campground in Warren County. The cottontails were browsing on the light green root suckers of sassafras that were abundant in one part of the campground. That area was a haven for many kinds of birds and small mammals. Among all the plants there, sassafras obviously was important to the rabbits.

This set me to wondering how important sassafras was to other animals. I later learned it is important to many species of wildlife, and that the record of man's interest in sassafras, for its supposed medicinal value, goes back more than 400 years.

Food for Many Species

In Pennsylvania, as in much of its range, sassafras is highly preferred by wildlife. The buds, leaves, twigs and bark are heavily used by deer in all parts of Pennsylvania. In areas where deer are plentiful, small sassafras plants may not survive very long because they are so palatable to deer.

Twigs, buds, and bark are likewise an important food of the eastern cottontail and the snowshoe hare. On State Game Land 86, I once observed a snowshoe hare browsing heavily on sassafras sprouts and root suckers. The twigs, leaves, bark, and fruits are also taken by the Mearns cottontail, marsh rabbit, black bear, raccoon, beaver, woodchuck, and fox squirrel. In pastures, sassafras is often severely browsed by livestock.

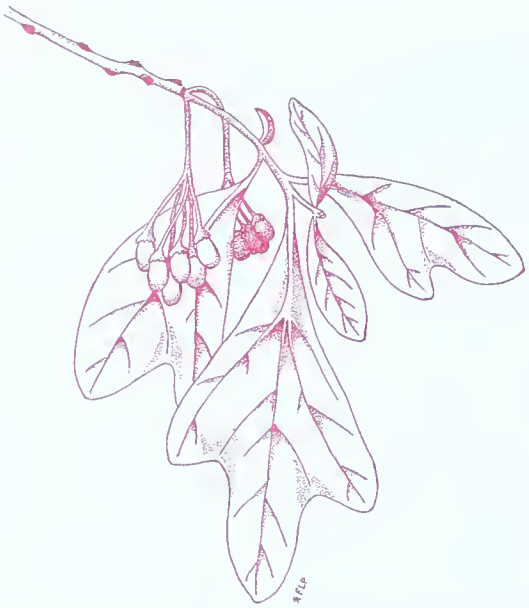
Where sassafras fruits are abundant, they are a favorite food of bobwhite quail. During the fall, sassafras fruit was the second most important native food of quail in southwestern Indiana, and it ranked high among quail foods in states from Missouri to Rhode Island. Quail take the fruits from July to February and the seeds until May.

Sassafras fruits also rank high as turkey food in Pennsylvania. They are also eaten by the red-eyed vireo, white-eyed vireo, warbling vireo, gray-cheeked thrush, hermit thrush, olive-backed thrush, veery, kingbird, phoebe, crested flycatcher, pileated woodpecker, yellow-bellied sapsucker, flicker, robin, bluebird, catbird, towhee, mockingbird, brown thrasher, and yellow-throated warbler.

In addition to its palatibility, sassafras is a highly nutritious food. The fruits are high in protein and carbohydrates and low in crude fiber. The fat content, 44.5 to 51.4 percent, is among the highest for any wildlife food. Sassafras also provides fair cover, and many nests have been spotted in and around sassafras trees and thickets.

History of Uses

Soon after the discovery of America, sassafras became famous for its supposed medicinal virtues. Its reputation was spread in 1574 by Nicholas Monardes, "Physician of Seville," when he wrote the "Joyfull Newes Out of the Newe Founde World." He described sassafras as being a remedy for "Quotidian Agewes (malaria), large importunate fevers, Tertian Agewes, griefes of the breast caused by cold humours, griefes of the head" for "them that bee lame and creepelles and them that are not able to goe." He added that "it comforteth the liver and the Stomacke . . . it dooeth make fatte . . . doth cause lust to meate." Sure enough, thereafter, one expedition after another was sent to America to search for



THIS IS HOW a sassafras twig looks in the fall. This species provides food for many kinds of wildlife and may have some medicinal value.

sassafras. In 1603, two merchants of Bristol, England, formed a company for the sole purpose of gathering sassafras.

Sassafras, particularly bark from the roots, was also used in soups, condiments, and tea. American Indians and early settlers made sassafras tea during the spring, when the sap of the sugar maples was running. Choctaw Indians showed settlers how to make "gumbo filet" from young tender stems and leaves that had been dried and ground to a fine powder. This powder was also used to thicken soups and was placed on the table for use like salt and pepper. Colonial Americans were told to chew the bark of sassafras to break the tobacco habit.

Sassafras wood was used for bedsteads (supposedly to keep off bed bugs), for chicken roosts to control lice, and for cabin floors in the belief that it would repel insects. The wood is somewhat weak and brittle, but is light and very durable. It is used as fenceposts and rails, as fuel, and for smoking and curing meat. The wood is also used for making cabinets, furniture, buckets, boat paddles, small boats (such as the Ozark johnboat), and boxes; and for repairing barrels, tubs, and casks.

Sassafras oil distilled from the bark and twigs is used to flavor medicines, tobacco, root beer and other beverages, toothpaste, candies, perfumes, soaps, disinfectants, and as a repellent against the screw-worm fly in camphor, safrol, and eugenol compounds. Packaged sassafras root chips may be purchased for brewing tea. Leaves have been used to make a yellow-tan dye, and extracts from the bark make an orange dye for wool.

Sassafras is planted as an ornamental for its fall colors. The leaves may be yellow or blood-orange, blotched with bright vermillion, or the softest salmon pink. Sassafras is useful for controlling erosion on steep slopes. And it was found to be a better choice than black locust or pines for restoring depleted soil in old fields.

Habitat and Life History

Sassafras commonly invades open areas such as old fields. It grows best in full sunlight on rich, sandy loams that are neutral to slightly acid. But it is found in nearly all kinds of soil and moisture conditions and persists for some time after it becomes shaded by other trees. Typical locations are fields and pastures, strip mines, dry ridges and upper slopes, roadsides, and fence rows.

Sassafras withstands browsing by deer if they remove less than one-fourth of the annual growth. Sassafras is fairly free from damage by plant diseases or insects, although it is one of the favorite forest-tree foods of the Japanese beetle. But it is sensitive to herbicides, salt, fire, and severe frosts in the spring.

Because sassafras does not compete aggressively with other trees, it usually is a temporary part of maturing forest stands. Its life expectancy is said to be 100 to 400 years, but usually is much shorter. Although sassafras grows to large-tree size in the South, it usually only reaches the size of a large shrub or small tree in Pennsylvania.



The rooting system extends out from the tree at a depth of six to 20 inches. These lateral roots are exceptionally long and are capable of forming root suckers. If the tree is cut down, many root suckers and stump sprouts usually develop, and they may form thickets. The thickets can expand outward at a rate of about 2½ feet per year. Similarly, if roots are cut by plowing or grubbing, nearly every piece of root may send up a sprout.

Individual sassafras trees bear either male or female flowers, but not both. The female-flowered trees start bearing fruit when eight to 10 years old, and their maximum production occurs at age 25 to 50. Good crops ordinarily occur at one- or two-year intervals. The fruits ripen during September and October and are dark blue, shiny, oval drupes about one-third to one-half inch long.

Propagation and Management

Birds distribute sassafras seeds and aid in establishing the plant in new areas. But seedlings are not common because most reproduction is by suckers or sprouts coming from established plants. In Pennsylvania and other northern parts of the range of sassafras, its seeds do not germinate readily. I tried several different treatments on seed collected in Warren County, but failed to produce a single seedling.

The best propagation method is from root cuttings. Sections of root that already bear a sprout are best. Cuttings four to seven inches long should be collected in April from primary roots and then planted horizontally, either directly in the desired area, or in a nursery row from which they can be transplanted the following year. A common practice is to cut around suckers with a spade and let them remain in place for one season before transplanting. Root cuttings to be planted into new areas should be selected from fruit-bearing trees, particularly in areas managed primarily for quail, turkeys, or nongame birds.

A good management practice, where sassafras is present, is to plow up the area around the trees, thereby cutting and scattering many of the roots. Where only scattered, large sassafras trees exist, it may be faster and cheaper just to cut the trees. The far-reaching root systems will then bring forth numerous sprouts and suckers. Where deer browse is of primary importance, sassafras that has grown out of reach of deer can be top-killed by a light fire, which will induce formation of sprouts and suckers. This procedure can also be followed where the sprouts and suckers have become too large for rabbits and hares to cut.

Franz Pogge is a research technician with the USDA Forest Service, Northeastern Forest Experiment Station. This paper is based on his studies of sassafras propagation and his field observations in Pennsylvania and West Virginia.

Bigger Beavers

One of the largest rodents in the world, a full-grown beaver will weigh between 40 and 60 pounds, and authentic weights of 70 to 80 pounds are known.


—DOUG PIFER

THE DEERSLAYERS

By F. T. Ogrin

BACK IN THE good old days, which to the present generation probably doesn't go back more than a couple of decades, many of the farm folk in deer country took in hunters. They would board as few as one or two on up to a dozen or more, depending on their accommodations. Usually the hunters were kept for a minimum of three days, which was about as long as many of them thought the hunting was good for. But some did stay for as long as a week, which was about as long as their hosts were good for.

In those days, deer hunting seemed to create more excitement than it does nowadays. Possibly all the new hunters in the woods, the ex-servicemen who decided that deer-hunting was no longer to be confined to the well-heeled of the city folk, had something to do with it.

For my part it was neither here nor there. I had come on this Pennsylvania farm from a big Ohio city and rarely had even seen a deer before. That was right after WW II, which had cut down hunting to the point where the deer herd had multiplied to disastrous proportions. It was quite common to look out the kitchen window and see 40 or more grazing on the farm fields, far outnumbering the cattle we had got with the place.

It was soon apparent that along with the deer we had also inherited the hunters to hunt them. At first we were reluctant to continue the farm's custom of taking them in. All of the regular visitors lived in Cleveland and that fall some drove over to check with us. Most were older men, in their 60s and of foreign extraction. All appeared to be in business for themselves, either in tavern-keeping, groceries, or hardware. In those days they were typical of the men in Cleveland who could afford to go deer hunting in Pennsylvania.

Some had been coming to the farm to hunt for 20 or more years, and they were mightily perturbed to hear that all of a sudden it might be closed to them. They had no other place to go, they told us, and hunting deer here on the farm was a thing they had always looked forward to with great eagerness each year. Wouldn't we change our minds and take just a few of them? It seemed almost a crime to go against the looks on their faces. We guessed it might be all right, capitulating easily to their pleading. There was plenty of room in the old farmhouse and the old-timers did look like a lot of fun.

We must have capitulated more often than we realized. When the last day of November rolled around, instead of the five or six hunters we expected, 15 came trooping in with their luggage, guns, and other gear. The house seemed to bulge with them. The sudden pandemonium took a bit of getting used to.

After all the years they'd visited, the old hunters were more used to the inconveniences of the farmhouse than we were. It bothered them not in the least that the place had no running water, no inside bath, no central heating. They were roughing it for the three days most of them stayed; they did not bother to shave, washed only when absolutely necessary, and if it got too cold in the unheated bedrooms, they simply kept some of their clothes on in bed.

Most of those old-timers were not what you'd call dedicated hunters. Their ardor diminished rapidly after the first day. What they really wanted was to get away from the mad rush of the city for a few days. Hunting deer or just walking about or sitting in the woods was simply an excuse to be there. If a buck came sauntering by, well, that was just fine with them. But if none did, which was the usual order of things, they didn't worry over it.

Inopportune Moment

Just being in the woods was exciting enough for them because they often saw bunches of deer going by. Now and then something shootable came their way, but invariably it seemed to make its appearance at an inopportune moment—such as when the old nimrod's rifle was leaning against a tree a dozen feet away, or he had just poured himself something warm out of his thermos. Or else the suspected buck had been so wily at concealment that he had not shown a horn until it was too late.

Listening as they discoursed on the events of the day in their colorful dialects was cause for much merriment. I well remember one tavern keeper describing an exceptional specimen that came upon him in the woods below the farmhouse.

"I hear som'teeng und I look und all of a sodden, der he is. I look on heem und I never see sotch a deer. He stond der like a - - - like a - - -" Here the old hunter was at a lack for words to adequately describe the noble creature he had beheld, but then he brightened as the proper manifestation suddenly



VISITING HUNTERS often saw bunches of deer going by, and now and then something shootable came their way—usually at an inopportune moment.

came to him - - - "like a monoooment!"

The definition seemed rather excessive to me at the time but some years later I was confronted by a similar apparition and then learned exactly what he'd had in mind.

There was something about those Old Country hunters and their rather low demands on the sport that I did not understand until later. The fact that they were just able to hunt deer was unique in itself and getting one was really a secondary matter. They had left Europe in their teens and early 20s, an age during which the young man feels the strongest urge to be a hunter of wild game. But while there were many kinds to be hunted in the countries of their origins, the old Austro-Hungarian Empire, they were all too aware that it was not theirs to hunt.

Through our history books most of us are aware of the situation that existed in early Britain when it was worth a man's head to be caught poaching deer, when the phrases "king's deer" and "the sport of kings" meant just that. It was no less drastic on the Continent where wild game was likewise reserved for royalty and their nobles; even in later times an underling could go to jail merely for shooting a rabbit. For the young man brought up under those restrictions, hunting deer was synonymous with engaging in a pastime of the nobility.

But while those old hunters rarely bagged any deer, at least not in the years I knew them, their enthusiasm for the hunt flourished undiminished, particularly for that first day of each year. On that long awaited morning they arose in the bitter cold darkness, ate a large and noisy breakfast and were out of the house before 6, their boots crunching in the cold-dried snow, while I smiled to myself and turned over in bed for another forty winks.

They never ventured deep into the forest that surrounded the farm, the thousands of acres of Allegheny National Forest, but ensconced themselves on its edges, which from long experience they knew was as good a place as any to hunt deer. Then, too, in the event they got one, it would not be such a long drag back to the farm.

As time went on, I learned why those old-timers rarely got a buck. Not only did they lack the hunting skills of a Boone or Crockett, but they were also downright careless in their behavior as well. On one of my own excursions through the woods I had paused briefly in an area where two of them sat against trees a hundred or so feet apart. Before long I became aware that they were carrying on an almost constant conversation in large, stage-voice whispers that must have perked up the ears of all the deer within a quarter-mile.

Even though most of them left in the morning with enough provisions to last them for days, they were usually back at the farmhouse by mid-afternoon for hot coffee and perhaps a siesta. One afternoon seven of them sat in the kitchen drinking coffee when my mother observed through the window about a dozen deer making their way through the orchard.

There was a wild scramble for the door. As was their custom—a poor one at best—their guns had been left leaning against the back of the house to relieve themselves of the chore of unloading them. In the excitement, each man grabbed whatever gun was handiest, so that one used to a pump gun found himself searching for the safety on a bolt action, while a lever action man found himself puzzling over the intricacies of a pump. During the pandemonium, the deer casually faded from view.

Waning Years

We moved to the farm in the waning years of those deer hunters, however, and in the following years one after another dropped out because of ill health or just plain old age. They were replaced quickly enough by another set of hunters, most of whom had seen service during the war. Married only a few years and raising young families, besides being saddled with payments on new homes, furnishings, cars, etc., they really did not have much money to spend on hunting deer in Pennsylvania, since they too came from Cleveland.

While the old hunters had been un-

daunted by the fact that their hunts produced few deer, the new hunters were of another doctrine. Their past was not of the Old Country, where the privilege to hunt was reserved for the upper class. Here, every man had equal right to do so. For these, no sentimentalities of past or present were involved; there was only the rivalry of the hunt and the all-engrossing ambition to get a buck—the bigger the better.

After Some Blunders

After some blunders, most of this group became good hunters. They had a great love and feeling for it. They hunted deep into the forest, climbing the ridges and going beyond them so that they spent most of the time walking. Sometimes they got their deer back there, requiring hours of exhaustive labor to bring them in. After all the time spent in the factories and mills of the big city, it was those days in the woods which were great times for them.

One season I took one of these men on a circuitous tour of the farm to see what we could kick out. By the time we had nearly completed the round we were tired enough for a breather in the woods just below the farm. We had barely settled ourselves on a deadfall when my partner's attention was caught by something. I followed his gaze and there, sure enough, saw some deer. They were coming in follow-the-leader order, passing through an opening in the woods one at a time, as if on review. We could vaguely see the main body of them in the woods beyond, and there appeared to be more than 50 of them. For my partner it was a chance that seemed too good to be true. Trembling with excitement and anticipation, he got himself into position and awaited the moment when, instead of the usual doe, a fine buck would appear in the opening.

One after the other the deer came, seemingly without end, to pause briefly at the one particular spot and then continue on their way. It was a fascinating thing to behold and we were in no way prepared for what happened next. There was a sudden wild flurry of barking and in the next instant the woods was full of deer running in every direction. Several even headed our way and veered off just in the nick of time. In another moment they had vanished and my friend sat there cussing our rotten luck and the author of it, my farm dog, which now came over with lolling tongue to be commended for his good deed. He was no deer-runner, since it required more energy than he was capable of, but he did like the excitement of dispersing these creatures when they encroached too closely on his domain. He got nothing but baleful looks from my partner, who felt certain that in that mob of deer there surely must have been a buck or two.

Through the years, with a dozen or more hunters operating out of one base, it was inevitable that now and then an amusing incident would be experienced by some of them. One of the earlier hunters, whose tenure at the farm was short-lived after the following occurrence, had an outgoing personality which unfortunately turned to truculence and agitation when things went against him. He had set himself on post at the far end of the pasture where deer were wont to pass. After some hours of waiting, he saw a nicely antlered buck coming through the woods. The deer steadily made its way toward him and the hunter felt it was only a question of time before the kill was his. But the buck had hardly left the woods before it was dropped in its tracks by a shot. In an irrational outburst of rage, the hunter ran out to confront the other man, who happened to be one of his own partners. An hour later he was still arguing over the matter in the farmhouse, his contention being that if his friend had not opened fire the buck would have been his. Needless to say, his reasoning fell on deaf ears.

In the afternoon he went hunting again, in the same place, and by fool's luck had a chance at an even finer deer than the first. But it was only wounded and made off, with him in frantic pursuit, endeavor-

"I HEAR SOM'TING und I look und all of a sodden, der he is. I never see sotch a deer. He stond der like a . . . like a . . . like a monooment!"



ing to get in a finishing shot. The buck took him the length of the farm and then plunged into a dense evergreen thicket through which the going was slow and difficult. It then entered a swampy area where the pursuit was even more difficult. Finally through the trees the hunter saw the right-of-way of the big pipeline—and just then heard a shot ring out some distance ahead.

When he got to the pipeline he could see the tracks of the buck in the snow. They led ahead to where it lay, the figure of the hunter who finished him off already bending over to dress him out.

The unlucky hunter's lamentations when he got back to the farm bordered on the insufferable, but they engendered no more compassion than his previous outcries.

Brought Boss

In another instance, to illustrate the turns man's rivalry in the sometimes competitive sport of hunting may take, two young men brought their boss, whom they worked for in construction, up to the farm to hunt. Actually they had striven hard to keep from bringing him. But they had for several years regaled him with their tales of their hunts, along with plenty of proof, while he had in turn given forth with his moose and bear hunting adventures in Canada, which they considered pure baloney, so that in the end they had relented and decided to bring him along to teach him a lesson.

They came during the worst blizzard we'd ever experienced on the farm. The road drifted over with three or four feet of snow. It took them seven hours to drive in from the city, and halfway down our road they had to abandon their pickup to the drifts and slog the rest of the way in, dragging their gear along in a tarp. It was obvious that the two friends found the hardships the basis for a lot of humor, directed at their mentor. The situation was heightened during the night by their guest's ungovernable shiverings in their frigid bedroom. Apparently they had not bothered to inform him of the rigors of the lodgings.

On opening morning the two dutifully took their guest through the frigid darkness to the far corner of the farm and situated him there under an ancient apple tree. They had already discussed with him the ensuing strategy which they were now about to embark on. While their boss waited, they would take a wide swing through the area and return to him, hopefully driving up a legal deer.

Their boss had no knowledge of deer hunting methods in this region. The idea seemed reasonable and he prepared to await whatever the procedure had in store for him. The two hastily departed and once out of sight made a bee-line away from there.

Barely a few minutes after opening hour, several deer came out of the woods and made their way within easy range of the apple tree. One was a buck and while our hero was debating whether to put the sights on him, he saw out of the corner of his eye another deer coming. There was no mistaking this buck, and when the distance had been suitably shortened, it was brought down with an easy shot. There was no hurry about the dressing-out process and the drag, a fairly long one, was interspersed with plenty of pauses for a rest or a smoke. Even so, it was barely 8:30 when he had the deer in the yard. I went out and helped him hoist it up on a barn beam.

As was their usual custom, his two companions came in during the early afternoon for a snack and a short doze by the stove. They were somewhat startled to find their boss already there, and not a little nonplussed to find him laying claim to already having gotten his buck. A quick trip to the barn confirmed this wholly intolerable fact. Without more ado they gulped their coffee and hurried back into the woods, not to return until dark—empty-handed, of course, frozen and famished.

They hunted the next two days as they had never hunted before, with the same luck. They would have kept it up all week except that their boss was commencing to make impatient sounds. They were a pair of extremely disgruntled nimrods when they took off the next day, the boss's deer displayed prominently on the hood instead of in the bed of the truck where they wanted to stow it. It wasn't long before I heard the two had quit their job and gone to work on their own. I don't know if the hunt had anything to do with their change.

But that was all a long time ago and we don't keep hunters any more. In fact, few people seem to now, perhaps because over the years many of the hunters have put up their own camps.

The deer are still here, of course. Because they are more commonplace than other creatures of the wild in these parts, except for birds, to me they are simply a part of the landscape. But sometimes one is encountered that is memorable and even exciting, like the one I recently saw poised for a moment between two big hemlocks. In spite of myself, my mind flirted inexorably with the word "monument," but for some reason it did not seem appropriate. Instead, it seemed more in keeping to think of Prudential's emblem elk.

But then, maybe that's what it had been all along.



DUE TO THE INSPIRATION of a third-grade class from Upper Darby, the firefly has been named the state insect of Pennsylvania.

Pennsylvania's State Insect

By Nick Kerlin

WE SEE them in abundance each midsummer evening, blinking their silvery glow and illuminating the darkness. Each of us has at some time taken a glass jar and captured these miniature "flashlights of the darkness," keeping their cheery glow with us for a few moments longer. These creatures represent one of nature's most unusual summer displays. And recently, joining the white-tailed deer, the hemlock, the ruffed grouse and the mountain laurel, a new form of nature has been chosen to represent Pennsylvania. We proudly present the state insect of Pennsylvania, *Photuris pennsylvanica,* better known as the firefly!

This fascinating creature gives off light in a way that far overshadows man's feeble attempts to do so. The "cold light" of the firefly is actually far superior to any lighting by man. Whereas the average electric light bulb produces light with only 30 percent of its energy—the remainder being given off as useless heat—the firefly utilizes nearly 98 percent of its available energy as light.

The light of fireflies, both male and female, is produced in the rear segments of the insect's abdomen. Beneath the outer translucent skin lie the light-producing cells, and beneath these is a layer of reflector cells. In the first layer, a substance known as luciferin is produced by the cells. Burned chemically by an enzyme, this turns into the cold light of the firefly. This reaction produces so little heat energy that it would take over 80,000 fireflies to produce the same amount of heat as a single candle flame. The blinking of the light is controlled directly by the

nervous system, which regulates the amount of oxygen flowing to the light-producing cells.

As with most displays by nature's creatures, the flashing serves a purpose: a means of attraction for mating. The longer and brighter flashes of the male excite nearby females, who respond by flashing their smaller, dimmer lights. Males are equipped with large eyes, enabling them to spot the flashes of the females. Each firefly species responds to different numbers of flashes, to differing duration of flashes, and to different intervals between answering flashes.

The male of one Pennsylvania species, *Photinus pyralis,* flashes four or five blinks at six-second intervals. If a female is near, she responds with a blink two seconds after the male's series of flashes.

Usually the light produced by fireflies is yellow-green, but it may range from red-orange to blue-green, depending on the species. Temperature also influences the flashing pattern; more flashes will be noted on warm summer nights than on cool ones.

You may on rare occasions observe a phenomenal display—the synchronized flashing of thousands of fireflies in one area. For some unexplained reason, under certain conditions all the insects flash off and on at the same interval, similar to blinking lights on a Christmas tree.

The next time you see this marvelous creature of the dark, appreciate it not only for the still-hidden secret of its cold light but also as a true sign of summer as well. You, too, may understand why a third-grade class from Upper Darby decided to take the time and effort to begin the campaign that succeeded in making the firefly the state insect of Pennsylvania.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Home Guide to Muzzle-Loaders, by George C. Nonte, Stackpole Books, Cameron & Kelker Streets, Harrisburg, Pa. 17105, 219 pp., large format, paperbound, $6.95. There's a steadily growing interest in M/L guns, and Major Nonte's latest book contains a wealth of information for this group. It discusses different types of rifles, muskets, handguns and scatterguns, tells how to develop loads for them, how to shoot them, discusses black powder and its behavior (which is far different from smokeless), maintenance and repair of these guns—even how to build your own. An awful lot of good information is crammed into these pages.

The Tranquillity Stories, by Col. H. P. Sheldon, ed. by Ralf W. Coykendall, Jr., Winchester Press, 460 Park Ave., New York City 10022, 288 pp., $12.50. The late Col. Sheldon was one of the leading writers on guns and the outdoors, back in the '30s and '40s, and during that period he wrote forty-one stories which were issued in three small, limited editions called **Tranquillity, Tranquillity Revisited,** and **Tranquillity Regained.** These stories have now been collected into this single volume, and it's the sort of book which will be read and re-read through the years. Tranquillity is Sheldon's fictional name for his hometown (Fair Haven, Vt.), a place where there are but two seasons—hunting and fishing—and the stories are about the people who lived there. You'll like this book.

A Field Guide to Birds' Nests, by Hal H. Harrison, Houghton Mifflin Co., 2 Park St., Boston, Mass., 257 pp., $8.95. Latest in the Peterson Field Guide Series, this handy volume covers the nests, breeding ranges, habitats, and eggs for the 285 bird species found in the U.S. east of the Mississippi River. Color photos of nests and eggs by Harrison, a former GAME NEWS columnist, and bird sketches by Ned Smith illustrate this useful and informative book.



PGC Photo by Biologist John Kriz

FOR WHITETAILS IN WINTERTIME, Presque Isle Peninsula becomes a trap. It's able to support only a few deer year round, so natural reproduction brings on starvation, making it necessary to remove many animals.

Presque Isle "Shootout"

By Chuck Fergus
GAME NEWS Staff Writer

PRESQUE ISLE IS a low, sandy peninsula shaped like a slender left arm ending in a thick fist. It juts into Lake Erie just north of the city of the same name. In winter, the peninsula is barren and windswept, with ice in the inland waterways, a bare forest floor and trees that stretch black branches against gray skies. Ice dunes—blue-white, cold and cheerless—pile high on the beaches and march toward the horizon north and west of Presque Isle. Canada is 30 miles across the great lake.

Presque Isle is a Pennsylvania State Park with a marina, picnic areas, beaches, hiking trails and a road system. Despite heavy human use, rabbits, fox squirrels, birds, foxes and raccoons live on the six-mile-long peninsula; swans, gulls, ducks and geese congregate in the surrounding waters of Lake Erie. The peninsula might even be a balanced ecosystem if not for one species: the white-tailed deer. Many years ago, area residents released forty deer in the relatively small, confined area. These deer have periodically multiplied and overbrowsed the peninsula, resulting in a long history of starvation losses. In the past, game protectors removed deer through controlled shooting.

The whitetail is a browser and must eat two to seven pounds of vegetation daily to remain in good health. In winter, deer prefer buds, tender twigs, leaves of trees and woody shrubs. All these exist—in limited amounts even under normal conditions—on Presque Isle's 3200 acres.

But conditions are far from normal on Presque Isle now.

Erie County Game Protector Andy Martin has Presque Isle in his district. As early as autumn of 1973, Martin sensed that things were out of order on the peninsula. Obviously, there were too many deer. At a time when Pennsylvania hunters were thinning



PGC Photo by CIA Fred Servey

BIOLOGIST Steve Liscinsky prepares to immobilize a deer. This is not a simple procedure despite such an impression given by TV shows. Many deer die.

the deer herd throughout the rest of the state, Presque Isle's whitetails were eating themselves out of house and home.

DGP Martin noticed a dramatic increase in the number of deer killed on the park's roads. Also, deer had browsed off much of the vegetation on the peninsula. Another factor working against the herd was the fact that for two years Lake Erie's level was the highest it's been in many years. Much land that once had provided food and cover was now marshy or under water.

In early winter, residents living in the area where Presque Isle departs from the mainland began complaining to the game protector. Deer from the peninsula were wandering into yards in this neighborhood and eating shrubbery and other expensive ornamental plantings. Movement on and off the peninsula by animals was limited, as the land narrows to a width of less than a hundred yards in places, but hunger was apparently driving some of the deer off Presque Isle.

Then came reports of sick deer from the park itself, where State Park patrolmen told Martin they'd found 10 dead whitetails.

DGP Martin picked up three of the dead animals and took them to the Pennsylvania State Police crime laboratory in Lawrence Park. Here, Anthony Balut used the lab's metal detector to search for bullets in the animals. He found none, eliminating the possibility that the deer had been shot illegally.

Martin next phoned Dr. Ken Felix at the Glenwood Pet Hospital. When Dr. Felix heard details of the deer die-off, he volunteered his services. He stopped by DGP Martin's headquarters and performed autopsies on two of the deer. The veterinarian sent urine and stomach samples to the State Police lab; there, tests ruled out poisoning but revealed coccidia, parasitic mircoorganisms often found in deer but not usually fatal by themselves.

Reports of dead and dying deer continued to stream in. By late winter, Martin and Robert E. Sutherland of Erie, a member of the Pennsylvania Game Commission, decided to try to determine just how many deer had died on the peninsula. Commissioner Sutherland arranged a news conference for March 29, when DGP Martin explained the situation to the media and requested help from the general public in searching Presque Isle for dead deer.

The following Saturday morning was cold and overcast, but more than 300 people showed up for the search. By the day's end, 31 dead deer had been found; signs of overcrowding and a depleted food supply were widespread on the peninsula. Searchers noticed heavy deposits of deer droppings, well-worn deer paths and a distinct browse line. The main browse item on Presque Isle is silky or red-stem dogwood, and this had been eaten as high as the deer could reach. The whitetails also had browsed edible parts of greenbriar. Then the deer had turned to bayberry and ninebark, starvation foods that offer little nourishment.

One of the dead deer was taken to Penn State University, where pathologists performed a detailed autopsy on the animal. In addition to coccidia, they found a large number of *Pneumostrongylus tenuis* (brain worms)

in the lining between the skull and brain. Most Pennsylvania whitetails carry brain worms, but these parasites aren't usually fatal unless they heavily infest an animal. An infected deer passes the brain worm eggs through its droppings. Other deer forced into a small area through overpopulation pick up the eggs while feeding, thus spreading the infestation.

In general, the deer on Presque Isle were dying from parasitism, winter stress and starvation—all caused by overcrowding.

New Life Abounded

In the spring of 1974, the park greened up and surviving deer found it easier to get food. No more deer were discovered dead of starvation; in fact, new life abounded as does dropped fawns. If the general public forgot about the deer die-offs, however, DGP Martin, Commissioner Sutherland and Presque Isle Park Superintendent Mike Wargo did not.

Even though over 70 whitetails had died over winter, and the 1973-74 winter had actually been fairly mild, Presque Isle's deer herd was still far too large for the peninsula's carrying capacity. If nothing were done, many more animals would starve during January, February and March of the following year.

As autumn progressed and vegetation dwindled, the deer ranged over the peninsula in search of food. Park visitors left everything from corn to cucumbers in vain attempts to feed the deer. Officials realized that the cost of a proper feeding program would be enormous and would only perpetuate an unnatural situation.

"When a deer comes out of the woods and practically takes food from a person's hand, something's drastically wrong," said Park Superintendent Wargo.

Winter set in. Early in 1975, at least 10 deer died from lack of food and the stress of overcrowding, and it appeared that nature would again take its grim toll of Presque Isle's whitetails.

Wargo left it up to the Game Commission. If the PGC felt it best to remove some of the deer, he would cooperate. The Game Commission made an aerial survey of the peninsula and estimated the whitetail population at around 200 animals. Deputy Executive Director Harvey Roberts and Chief of Game Management Dale Sheffer checked food conditions and decided that at least 70 deer—more if possible—would have to be immobilized and taken off the peninsula.

PGC biologists and game protectors began practicing with the scope-sighted rifles they would use to drug the deer. Bob Waldeisen, of Pneu-Dart, Inc., Williamsport, designed these firearms and the darts they shot. A dart consists of a yellow plastic housing, an injector needle and a dose of succinylcholine chloride, the immobilizing agent; a 22-cal. blank cartridge powers the projectile.

On January 20, 1975, the Presque Isle "shootout" began, with biologists and game protectors cruising the park in search of deer. A typical darting might be described something like this:

PGC Photo by Biologist John Kriz

WHEN THE DEER had recovered enough to breathe on their own, they were confined in straw-lined crates and loaded on trucks to be released on Game Lands.



After spotting a deer—usually one lured to bait-piles of corn and apples—Game Commission personnel moved close, chose a dart carrying a drug dose suitable for the target animal's estimated weight, and then bolted the projectile into the gun's chamber. The spotter shone a light on the deer; often whitetails actually walked toward the light, anticipating being fed. The shooter lined up the crosshairs on the animal's hip and squeezed the trigger. The darts produced a distinct *whack* when they hit their targets, helping the officers know they had made a good shot.

Shooters tried to keep darted animals in sight. Ten minutes after darting, the pick-up crew was called in to search for the target animal. When found, the deer was placed right side up, its head held carefully to make sure the animal could breathe without difficulty. If necessary, workers administered oxygen until the deer was breathing steadily.

The succinylcholine chloride immobilized—it did not "tranquilize"—the animal for about 30 minutes. When the deer was able to hold its head up and breathe on its own, it was confined in a reinforced cardboard or wooden crate lined with straw. Workers spoke quietly or not at all. This kept the deer calm and subjected it to as little stress as possible.

Darting took place during periods of suitable weather throughout the rest of the winter. By the time the Presque Isle shootout was over, the Game Commission had removed 127 whitetails after immobilizing them with dart guns. During the process, close to one third—31 percent—of the deer died. Actually, this was a low mortality rate considering the darted animals' condition. Some wildlife television shows create the impression that immobilizing or tranquilizing an animal is an easy task. But it's not—and the job gets even tougher when target animals are starving and weak.

The deer were released on State Game Lands in northwestern Pennsylvania. Here, though they will be subjected to legal hunting pressure during the regular season as are other deer, these whitetails will find ample food and a more natural environment than on Presque Isle. Transplanted animals carrying coccidia and other parasites pose no threat to the healthy wildlife populations on these Game Lands.

It's summer now. The land supports a maximum amount of vegetation and animals, and even on Presque Isle the remaining deer are in no trouble. But the succulent plant foods now available—the herbs and forbs of summer—will wither with fall's frosts. Hopefully, the peninsula has not been too badly overbrowsed and deer still on the isle will survive the coming winter.

Throughout the rest of the state, hunters will harvest many deer in December. The Presque Isle situation dramatically illustrates the service these hunters perform for our state's deer herd; were it not for this annual thinning of the population, deer would overbrowse vegetation in winter and create a critical food shortage for years to come.

Presque Isle—with its resident deer herd, island-like properties, proximity to the city of Erie and regulations against hunting—presented a unique problem which required a unique solution. Similar situations don't arise elsewhere in the state, where hunting is used as a tool of management to control the deer population.

The Presque Isle shootout was a costly operation. It drew game protectors and biologists away from their other duties, and required much planning, time and the use of special

I want to thank Erie County District Game Protector Andy Martin and Game Commission Wildlife Biologist John Kriz for their help with this article. They provided data on deer mortality and information on the darting and transfer of deer, gave me a tour of the peninsula and arranged interviews.—CF



PGC Photo by Biologist John Kriz

A SMALL DEER STUMBLED INTO the nearby marsh and stopped in two feet of water. Kriz carried it out. It died in his arms.

equipment. All this for a handful of animals, the cynic might observe; also, the program used hunters' money, because the Game Fund financed the operation when no outside organizations came to the aid of the deer. On the plus side, the Game Commission gained much information from the operation, including development of skill in darting and transporting deer and increased knowledge of drug doses needed for immobilization. It was the largest immobilize-and-transfer program ever implemented in Pennsylvania, and it alleviated an inhumane situation.

Unfortunately, this chapter of the Presque Isle story ends on a sad note, a note that may continue to sound.

Game Commission Biologist John Kriz visited Presque Isle in late winter. He filed this report:

"A storm blowing off Lake Erie cut short the last night of immobilizing and transferring of deer off Presque Isle. The next day dawned bright and sunny; conditions were ideal for determining the current deer population by counting tracks in the fresh five-inch snowfall.

"Almost immediately, I found a dead button buck. The bright red, gelatinous bone marrow showed that the deer probably died of starvation. About 35 deer were estimated to be in the large coniferous area. Ten deer and 12 beds were actually seen.

"On my way back to the truck, a small deer jumped up from some thick bayberry shrubs, trotted off a few yards and lay down. Then it stumbled into the nearby marsh and stopped, half-standing, in two feet of water. It wouldn't move. The little whitetail remained there with only the top of its back and head, just the nose and ears, above water. I went in and picked it up as gently as possible. The quarter-mile carry to the truck didn't take long; the fawn's heart gave up before we reached it, and the animal died in my arms.

"The fawn had the frame of a normal-size deer, and the dental pattern verified that it was born last June. But it was nothing but skin and bones and weighed just 41 pounds.

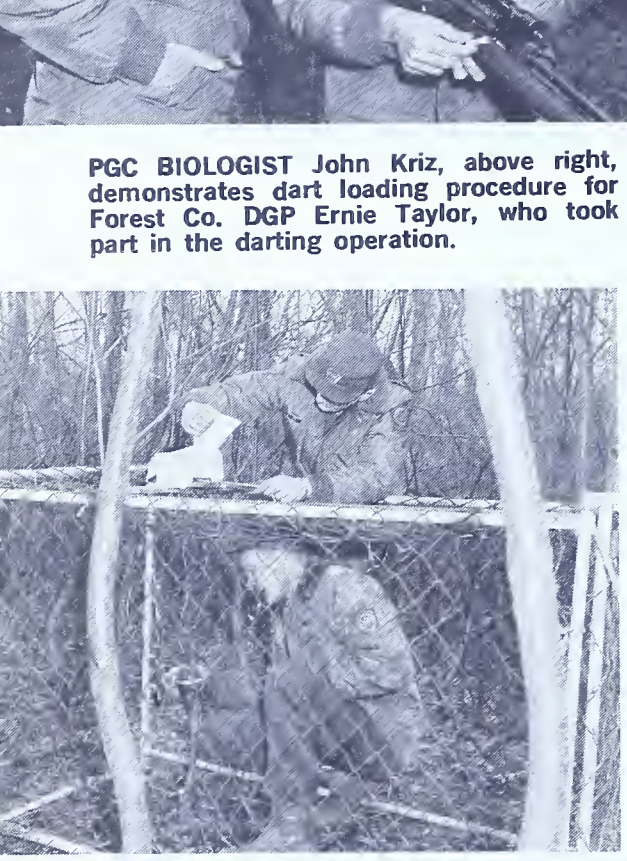
"I continued to count tracks. I found evidence of seven deer near Beach 10, four in back of the Coast Guard station, 10 around Misery Bay and along the east bay side, 10 in the Beach 6 and Administration Building complex, and six on the peninsula's neck—apparently, about 75 deer remain on Presque Isle."

Assuming that some of the 75 remaining deer were does that gave birth to fawns in May or June, the number of deer may already have jumped well over 100. Obviously, the Presque Isle shootout is only a temporary solution to an ugly problem that will recur as long as there are deer on the peninsula.

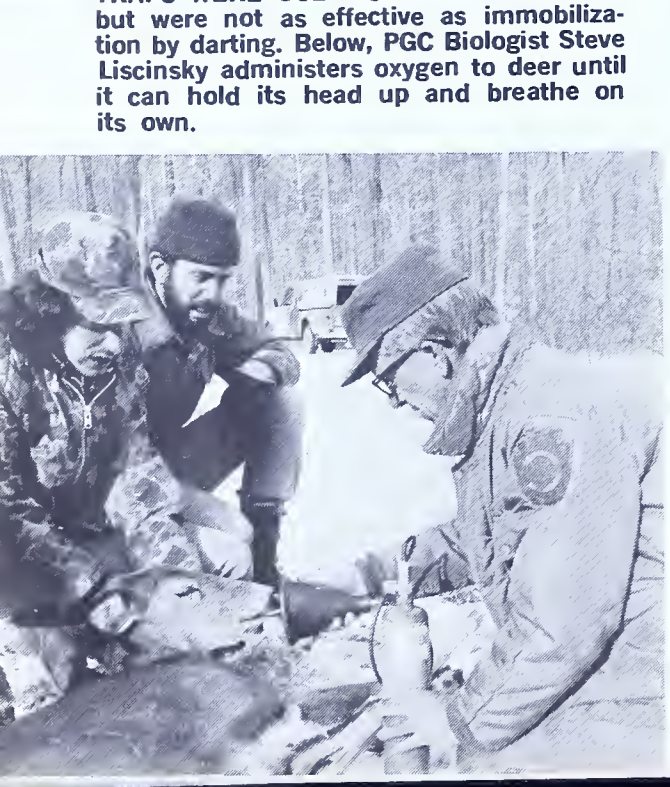
(More photos on following two pages.)



PGC BIOLOGIST John Kriz, above right, demonstrates dart loading procedure for Forest Co. DGP Ernie Taylor, who took part in the darting operation.



TRAPS WERE USED to catch several deer but were not as effective as immobilization by darting. Below, PGC Biologist Steve Liscinsky administers oxygen to deer until it can hold its head up and breathe on its own.





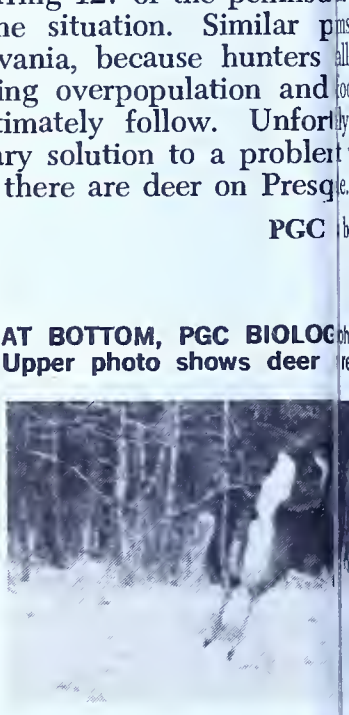
WINTER IS HARSH. Green vegetati

The "Shooto

REMOVAL OF DEER from tion and transfer to State and expensive. These photos s Transferring 127 of the peninsu inhumane situation. Similar p Pennsylvania, because hunters preventing overpopulation and that ultimately follow. Unfort temporary solution to a proble long as there are deer on Presq

PGC

AT BOTTOM, PGC BIOLOG
Upper photo shows deer







s gone and temperatures plummet.

in Pictures

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by F. Servey, J. Kriz and R. Cady

hn Kriz checks immobilized whitetail.
released on State Game Land.





ABOVE, LISCINSKY secures large buck to a stretcher. The animal was later placed in a crate and transferred off Presque Isle by truck for release on State Game Land.



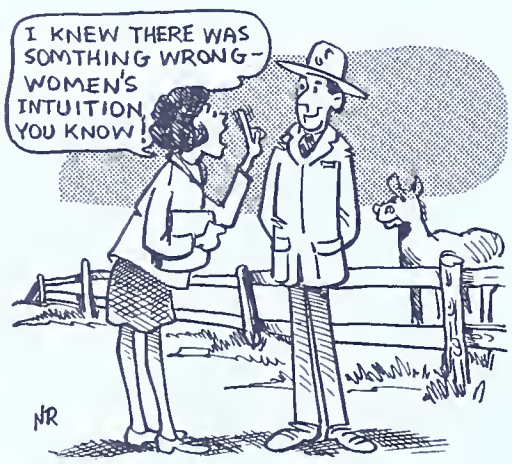
DEER WERE CARRIED on stretchers to the crates. Game Commission personnel removed 127 whitetails from Presque Isle.



FIELD NOTES

And Away We Go

INDIANA COUNTY – Interesting items have a habit of disappearing. I recently learned that GAME NEWS is the first magazine to vanish from the Indiana Senior High School library every month.–District Game Protector J. E. Deniker, Homer City.



But What About the Horses?

ERIE COUNTY – Some poachers are caught in unusual ways. A lady was driving along and saw two men with guns beside the road and a horse lying out in the field. A little later she returned and saw the men and another horse lying flat. She phoned the State Police and reported the men were shooting horses. Minutes later, a fleet of six police cars surrounded the culprits only to find the men were hunting woodchucks. Well, woodchucks weren't in season yet, and so . . . –District Game Protector W. A. Lugaila, Waterford.

Looking Back

ERIE COUNTY – Recalling the deer transfer project at Presque Isle sure brings some unusual memories: the captured deer that had a mason jar ring around its leg, the grouse that jumped aboard our truck, LEA Lorraine Yocum's bent cigar following a diving tackle on a nearly captured deer, etc. These incidents, as well as the help received from my fellow officers, deputies and general public, will always be regarded as one of the most interesting assignments I have had.–District Game Protector A. C. Martin, Erie.

Consistency–Who Needs It?

LUZERNE COUNTY – It was 4 p.m. Sunday, April 20, and I was thinking about a meeting I was committed to attend at 7:30. The phone rang twice and I now had a road-killed bear in the eastern part of my district and a road-killed deer in the other end of the district. I picked them up and returned to my office to find a message requesting an immediate return call. I was working a tight schedule but decided I had better check the emergency call before going to the meeting. The emergency –a man who had been feeding a rabbit all winter now wanted a box trap to remove the rabbit and its new mate from his garden. He stated that if I didn't give him a trap right away he'd shoot both rabbits. Isn't it funny how these animal lovers of the winter want to exterminate the animals they've spoiled when the animals stay around and eat their garden?–District Game Protector R. W. Nolf, Conyngham.

Thick-Headed

ERIE & WARREN COUNTIES – Some people never learn. I've arrested one individual three times since 1973 for fines and costs in excess of $700. All for the same thing–taking deer during closed season. I can't imagine how this person could ever eat another bite of venison.–District Game Protector G. E. Gibson, Corry.

Overpopulation=Starvation

TIOGA COUNTY – It might surprise most people, but while making my winter deer mortality surveys this spring, I found as many deer dead from starvation as I have found after much more severe winters. It appears that even during mild winters considerable starvation will occur when the deer population reaches high levels.–District Game Protector C. L. Keller, Wellsboro.

Case of the Rodless Runner

CUMBERLAND COUNTY – Several nights prior to trout season, I received information that several individuals were fishing in Yellow Breeches Creek, which had just been stocked. Deputy Bob Clark and I proceeded to the area. Since it was a very dark night, which would make it pretty easy for someone to slip away, Bob and I split up. He went upstream and I went downstream. While working back toward Bob, I heard him shout, "Halt, State Officer!" My light caught three people, running for all they were worth, two with fishing rods and one without. If the rodless individual would like a nice spinning rod and reel that he threw down as he was running away, please contact me. After we consult with Waterways Patrolman Heath, the rod will be returned to you.–District Game Protector J. P. Filkosky, Mechanicsburg.



We Get Around

ADAMS COUNTY – After I presented a program at the York Springs Lions Club, an avid GAME NEWS reader came up to talk with me. This was not too unusual except that the gentleman had just returned from a tour of Russia and said he had left several copies of GAME NEWS in Moscow. He stated that this is a good magazine and he hoped they would enjoy reading it. I guess GAME NEWS has readers the world over. [Not quite, but GAME NEWS does go to 38 foreign countries, including Russia.–*Ed.*]–District Game Protector G. W. Becker, Gettysburg.

One of the Good Guys

LYCOMING COUNTY – While patroling State Game Lands 134, I drove into one of the parking areas which is usually scattered with trash and litter. To my amazement I found the area spotless. All the litter had been picked up and placed in a pile and a homemade sign near the pile said: "Please don't litter." It was signed "M. Nature." Many thanks to the person or persons responsible for this sportsmanlike deed.–District Game Protector W. L. Hutson, Muncy.



The Deadly Click

FOREST COUNTY — Ralph Huff, a sportsman from Mercer County, told me he and a companion were hunting pheasants when a bird flushed in front of his friend. Ralph did not shoot. The other hunter took aim and pulled the trigger but all he got was a click as the gun did not fire. When the gun clicked, the bird dropped. Their retriever found the pheasant and it had a broken wing, but Ralph is sure nothing was wrong with the bird when it flushed.—District Game Protector E. L. Taylor, Tionesta.

How Right He Was

LAWRENCE COUNTY—On opening day of trout season, I decided to fish Slippery Rock Creek near here. Two State Policemen and one of my deputies and I all got to the creek about a half hour early. We took positions in the water, waiting for opening hour. Upstream a short distance was another fellow. As we waited for 8 a.m., we chatted. After a few minutes the man looked up and down the creek and said, "I suppose if you look around you'll find somebody with a badge hanging in a tree somewhere." One never knows—District Game Protector W. D. Shultz, New Castle.

Outstanding Record

CLINTON COUNTY — Hunting whitetails presents quite a challenge. It takes a great deal of skill, stamina and luck to take deer consistently. In fact, most hunters are consistent in the excuses they have to offer for failing to harvest a deer. I know one hunter in Pennsylvania who has not had to give an excuse during the past half-century. Charles Cross, of Hammersley Forks, this past antlerless season, bagged his fiftieth consecutive deer. Mr. Cross achieved this remarkable feat despite the loss of an arm and an eye in an explosion many years ago.—District Game Protector L. A. Kuznar, Renovo.



A Good Place Not To Be

TIOGA COUNTY — A hiker walking along the west rim of Pennsylvania's Grand Canyon recently glimpsed a large black bear disappearing over the edge. Running to get a better look at the critter, he blundered to within a few feet of the surprised bear and realized too late that he had placed himself between a mother and her cubs. Momma, wanting to get her cubs safely up a tree, uttered a warning growl which was instantly obeyed by her cubs—and by one startled hiker.—District Game Protector J. K. Weaver, Covington.

People Problems

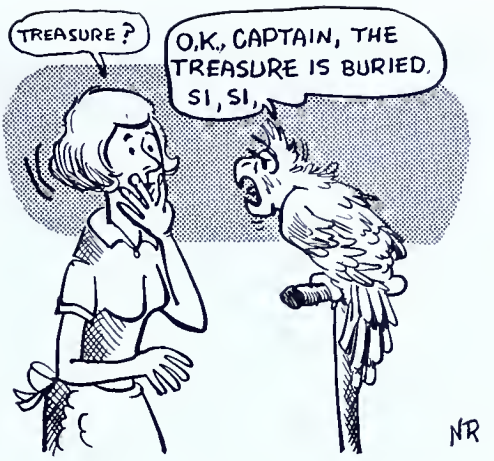
LUZERNE COUNTY — Two male bears, one weighing 310 pounds live weight, were killed by cars in my district during April. They made a total of 20 killed by vehicles since May of 1970. Records show that hunters, the people supplying the funds for our wildlife management work, harvested only 19 in the entire county in that 5-year period. Conclusion—the bear could outwit the hunter as long as he had proper habitat but the advances of our civilization have destroyed its habitat and the bear has been unable to adapt to the changes. Those of us who love wildlife realize we've come to a sad time when the bear, like the beaver in the past, is succumbing to the demands of mankind!—District Game Protector R. W. Nolf, Conyngham.

Another Problem

SOMERSET COUNTY — Have received numerous complaints concerning the various blackbirds (grackles, starlings, cowbirds) and believe they represent serious competition to our game and songbirds. I have seen and had reports of these birds stripping the seeds and berries from wild cherry, grape vines, multiflora rose and tartarian honeysuckle.—District Game Protector E. W. Cox, Somerset.

The Long Wait

CUMBERLAND COUNTY — Over the years I have received thousands of calls complaining about damages caused by wild animals. It was not until this month that someone was grateful enough to phone back and thank me for responding to his complaint and solving his problem.—District Game Protector E. F. Utech, Boiling Springs.



The Fun Part of the Job

MERCER COUNTY—People never run out of tales to tell their friendly game protector. For instance, this month I heard stories of a 250-year-old parrot that spoke three languages; a full-blooded Indian grandmother who shot a rabbit with a bow and arrow as it ate her peas; more information on taming a great horned owl than I ever cared to know about; a man with a basket of trout on the first day of the season; and numerous accounts of a past spring gobbler season. Very interesting . . . —District Game Protector B. K. Ray, Greenville.

No Rod, No License, But—

BEDFORD COUNTY — After some high winds, I was checking the roads on State Game Lands 26 for downed trees. As I glanced over toward Bob's Creek, I observed a fisherman climb out of the recently stocked trout stream. It was about 2 p.m. and he was wet from stem to stern but he didn't have a fishing rod. He did have a mask on his face and rings on his tail. I don't think the coon hunting fraternity would mind his taking a few trout, but I'm not so sure about the fishermen.—Land Manager J. P. Shook, Claysburg.

Cheers and Jeers

Recently, Trout Unlimited, along with Boy Scouts and a Conservation Club, held a litter cleanup day along Dunbar Creek on State Game Lands 51. Three truckloads of litter were picked up—everything from bottles to tires and even the front end of a car. You would hardly have known the place. But it didn't last long. Several hours later the local Waterways Patrolman arrested one man for littering and broke up a booze party. Under his supervision, they picked up their trash and left. Won't people ever learn? My thanks to Trout Unlimited, the Boy Scouts and Conservation Club for a job well done, and boos to the litterbums.—Land Manager D. E. Jones, Somerset.



Divin' Dog

BRADFORD COUNTY — Joe Trapani, of Laurel Lake near Troy, told me about his neighbor's dog, a blue terrier which stands in shallow water and waits until a fish swims by. The terrier then dives and sometimes catches the fish. Now Joe belongs to a drinking club in Troy, but it's only a coffee drinking club, so I guess you can say that instead of the fishing going to the dogs in some places, the dog has gone fishing.—District Game Protector W. A. Bower, Troy.

A Huntingdon County First

HUNTINGDON COUNTY — The first Huntingdon County All Sports Day was held April 25-26 at the fair grounds. Approximately 7000 people attended and everyone was pleased with the exhibits. The show was sponsored by the Alexandria Volunteer Fire Department, and these fellows deserve a hand for their hard work. This show was a first for our area and I sincerely hope it will become an annual affair with even more success than it had this year.—District Game Protector E. N. Gallew, Alexandria.

Enough Is Enough

BEDFORD COUNTY — As Land Manager Shook and I were coming down Tiger Hollow from State Game Lands 104, I noticed a number of crows were acting as though something wasn't quite right. We soon found out what it was. The crows had been deviling a redtailed hawk and eventually the hawk became tired of their antics and promptly removed the rudder from one of the crows. The crow could no longer fly, but when he hit the ground he sure did run.—District Game Protector B. L. Warner, Bedford.

Making Progress

NORTHAMPTON COUNTY — I have had the opportunity to talk to many Farm-Game Cooperators in this county. I am pleased to report I received very few hunter-related complaints. The only ones received were of hunters too close to buildings and going through unharvested fields, especially soybean fields. I hope this is an indication that due consideration and courtesy is finally being shown to our generous landowners.—District Game Protector R. W. Anderson, Nazareth.

CONSERVATION NEWS

By Ted Godshell

Facts on Waterfowl Habitat

OF THE 13.5 million acres preserved for migratory bird habitat in the United States, 8.25 million acres (61 percent) are preserved as a direct result of hunting-oriented programs. This basic fact sums up the critical role that America's duck and goose hunters play in conservation of waterfowl and a host of other wetland wildlife from marsh wrens to ospreys.

Of these 8.25 million hunter-financed acres, 5.2 million acres are owned or controlled by waterfowl hunting clubs. These private wetland and marsh areas are not only managed to provide prime waterfowl habitat, but also are kept out of the hands of those who would drain, dredge or "develop" these irreplaceable natural habitats. For example, last year a group of South Carolina duck hunters, members of the Santee Club, donated their 25,000-acre coastal tract to a land conservation agency. Much sought after by commercial interests, this $20 million piece of real estate will remain part of the nation's wildlife heritage.

The private efforts of waterfowlers have also been instrumental in preserving Canadian breeding grounds, where more than 70 percent of all waterfowl originate. In its 38-year history, Ducks Unlimited—an organization supported largely by U.S. waterfowlers—has raised more than $35 million to create drought- and flood-proof habitat covering two million water acres and encompassing 11,000 miles of shoreline on 1200 projects across Canada.

Waterfowl hunters also make significant contributions to federal and state habitat programs.

Since 1934, all waterfowl hunters 16 years of age or older have been required to purchase an annual federal migratory bird hunting stamp, commonly called a "duck stamp." Revenue from duck stamp sales is now about $11 million annually. To date, this program has collected over $153 million for acquisition of some two million acres of waterfowl production habitat and National Wildlife Refuge lands.

Additionally, monies which hunters spend on sporting arms and ammunition include an 11 percent tax. These revenues are earmarked for state wildlife restoration programs, including acquisition and development of migratory bird habitat. Since this tax was imposed in 1939, over $518 million has been collected, providing the Federal Aid in Wildlife Restoration Program with funds for acquisition of over a million acres of land by the states.

Conservationists agree that the key to abundant wildlife populations is proper habitat. And in the case of waterfowl habitat, the facts are clear. American waterfowl hunters have done more to preserve and enhance the native environment of migratory birds than any other group.



Big Game Scoring Program To Be Held

The Pennsylvania Game Commission's sixth Big Game Scoring Program will be held during 1976. The times and places will be announced later. This program began in 1965 and was held in alternate years until 1973. At that time it was noticed the number of submissions was dropping as the backlog of older trophies, which had been taken prior to the initiation of the program, decreased. Therefore, instead of holding a scoring session in 1975, it was decided to delay it until 1976.

This program was instituted when Game Commission personnel and members of the Pennsylvania Outdoor Writers Association noted that this state was well known for its large whitetail population but many persons had the impression that few of the animals taken were of trophy size. Personal observation had convinced these officers and writers that many large trophies were taken each year. To give these some of the credit they deserved, a Deer Records Program was set up. Scoring rules follow those of the internationally recognized Boone and Crockett Club system. In the first two programs, only deer racks were measured. In 1969, black bear skulls also were scored, and both animals have been scored in all subsequent sessions.

Fat Cats

Some French Canadians believe it is unlucky if a cat meows in the house on Christmas Eve. Therefore, they feed their pets especially well on December 24.

Waterfowl I.D. Booklet Given With Subscription

As long as our supply lasts, a copy of **Key to North American Waterfowl** will be given free with each 3-year subscription to GAME NEWS. This full-color, 32-page booklet identifies and gives much information on 62 species of ducks and geese. It is printed on "plastic" paper which makes it waterproof, impervious to oil and grease, and essentially tear-proof.

GAME NEWS

Enclosed find check or money order for $7.50 for a 3-year subscription to GAME NEWS. I understand I am to receive a free copy of **Key to North American Waterfowl** with this subscription.

☐ New ☐ Renewal

Key to North American Waterfowl may be purchased alone if desired. Price is $1.50, delivered. Check the following box if only this booklet is wanted. ☐

Name .....
(print plainly)

Address .....

City ..... State ..... Zip Code .....

Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pennsylvania 17120

In Memoriam

LeRoy Gleason, III
1898 - 1974
DGP; Assistant Supervisor; Supervisor Northcentral Division.
Retired 1963; 29 years service.

Calvin A. Hooper
1914 - 1974
DGP; Assistant Supervisor of Training; DGP Lawrence County.
Retired 1973; 25 years service.

Earl A. Kibler
1919 - 1975
Comptroller's Office.
10 years service.

William C. Shaffer
1900 - 1974
DGP Dauphin County; Superintendent of Training; Chief of Law Enforcement.
Retired 1966; 35 years service.

Casimir M. Stanis
1913 - 1975
DGP, LMO Susquehanna County.
29 years service.

Dale L. Stitt
1927 - 1974
DGP; LMO; PR leader, Southcentral Division.
13 years service.

Homer H. Thrush
1910 - 1974
DGP Lackawanna, Monroe, Cumberland, Adams and Dauphin counties.
Retired 1972; 26 years service.

Over Five Million Seedlings Planted

PENNSYLVANIA'S wildlife will soon be benefiting from more than five million seedlings planted throughout the state this spring. The seedlings were produced at the Pennsylvania Game Commission's nursery at Howard in Centre County.

Sportsmen's groups, conservation clubs, soil and water conservation districts, landowners cooperating in programs of the Game Commission designed to keep private holdings open to public hunting, other state agencies, coal stripping operators and others received seedlings which will provide future food and cover for wildlife.

More than half of the seedlings were planted by Game Commission personnel on State Game Lands, tracts which have been purchased with funds derived from the sale of hunting licenses and maintained as public hunting areas, and on farm-game projects, private land which is kept open to public hunting.

Species distributed included scotch pine, red pine, white pine, Austrian pine, banks pine, mugho pine, Norway spruce, white spruce, hemlock, willow, bittersweet, multiflora rose, autumn olive, black locust, flowering dogwood, silky dogwood, mackii honeysuckle, chestnut, Asiatic crabapple, sawtooth oak and bristly locust.

Several changes in the Game Commission's nursery program are planned starting next year. Because it is so prolific, there is less need for multiflora rose, and the production of this species will be trimmed sharply.

Also, with the exception of white spruce and hemlock, coniferous seedlings will be shipped from the nursery at the age of two years in the future, instead of three years as in the past. It is estimated that the change in practice will result in a savings of up to 25 percent in the cost of nursery operations.

Seedlings are provided free of charge by the Game Commission, and planting and maintenance for the benefit of wildlife are usually provided by interested sportsmen and landowners.

Reports Asked On Banded, Marked Doves

The Game Commission is seeking cooperation from sportsmen and the general public in its new project of banding and marking doves.

Doves are being banded throughout the state in an effort to trace their movement and feeding habits. Doves are primarily a migratory species but may also be found in local concentrations. Wing markers of various colors are also being attached to doves in Lebanon and Lancaster Counties. However, one is likely to see these birds anywhere in the state, or even beyond Pennsylvania's borders.

Commission personnel are anxious to gain as much information as possible about the sighting of doves with markers or recovery of leg bands. We need the following information: the name, address and telephone number of the person spotting the wing marker or finding a leg band, the date and location of the sighting or recovery, and the manner in which the band or marker was recovered.

The information should be reported to the Pennsylvania Game Commission, Division of Game Management, P. O. Box 1567, Harrisburg, Pa. 17120.

Visiting Hours at Pymatuning, Middle Creek and Siegel Marsh

Visiting hours at the Pennsylvania Game Commission's museum at the Pymatuning Waterfowl Area near Linesville, Crawford County, are 10 a.m. to 7 p.m. daily during July and August, 10 a.m. to 5 p.m. in September and October. Groups may visit the museum in November by appointment only. Group reservations can be made with Waterfowl Management Coordinator Ray Sickles at Linesville, RD 1, Pa. 16131, or by telephoning either 412-927-2199 or 814-683-5545.

Visiting hours at the Game Commission's Middle Creek Wildlife Management Area in Lebanon and Lancaster Counties are from 10 a.m. until 5 p.m. Wednesday through Saturday, and from 1 to 5 p.m. on Sunday through the end of November. Groups planning to visit at Middle Creek should contact Waterfowl Management Assistant Charles L. Strouphar at Newmanstown, RD 1, Pa. 17073, or by telephoning either 717 - 733-1512 or 717 - 949-3582.

Groups planning to stop at the visitors center on State Game Lands 218 (Siegel Marsh) in Erie County should contact District Game Protector Andrew C. Martin, 2805 Athens Road, Erie, Pa. 16510, telephone 814 - 899-8425. There are no regularly-scheduled hours at the Siegel Marsh visitors center.

Otter Info

Alert, active and highly intelligent, otters hunt for a living and range along stream courses for miles.

Early Dog Law

In 1873, the use of dogs for running deer or elk was made illegal in Pennsylvania.



Everything Your Dog Always Wanted to Know About Fleas, But Was . . .

Too Busy Scratching to Ask

By Jeannette Nye Lohner

"MY DOG has fleas," I sang, industriously strumming my ukulele. Cocking one ear in disbelief, my dog shot me a look of disgust and left the room.

What's bugging her, I wondered, plunking away at my version of "Little Brown Jug." She never minded my singing before. What I didn't know was that I had just touched on a very sensitive subject, one which had been irritating her on and off most of her life. Fleas.

Fleas to a dog are somewhat like the heartbreak of psoriasis to humans. Not fatal, but a nuisance which every dog would like to see scratched from the list of external parasites.

Unfortunately, the flea isn't one of our endangered species. It has been jumping around for millions of years, and as long as there are dogs and other warm-blooded animals which the flea can feed on, this insect will probably continue to exist.

There are over 1600 known species and subspecies of fleas, and they are found throughout the world. Here we're concerned with old *Ctenocephalides canis*, a member of the *Pulicidae* family, which in turn is part of the *Siphonaptera* order. None of which will impress your pooch, I'm sure. The common term for this creature is "dog flea." There is some suspicion that this flea carries various diseases of man, including bubonic plague, though it's the Oriental rat flea *(Xenopsylla cheopis)* and the human flea *(Pulex irritans)* which

usually are to blame for this problem.

If you can persuade your dog to lend you one of his fleas and observe it through a microscope, you will see that this six-legged insect's brown body is flattened on both sides. Measuring about 1/10 of an inch, it has backward projecting spines and combs which enable it to move easily through the hairs of an animal. The jaw is sharply pointed, designed especially for sucking blood, the only item on its menu.

Its eating habits leave a lot to be desired. Before plunging its sharp beak into the flesh it usually spits out part of its last meal. It also may deposit waste material. If this debris and any other disease organisms carried by the flea are spread into the bite, it may become swollen or inflamed and painful. Some animals and humans are more sensitive to flea bites than others.

Fortunately, the flea doesn't have wings, but it can jump as much as 12 inches or more than 200 times the length of its own body. If that doesn't impress you, pretend the flea is a six-foot man and visualize him jumping the length of four football fields.

Some fleas, like the shrew flea, prefer only shrews, while others, like the cat flea, will infest dogs, cats, mongooses, foxes, and even humans.

The flea's life cycle has four stages. First, the adult female lays perhaps 75 pearly-white, oval-shaped eggs in the animal's fur, in his bed or anywhere. She isn't particular. In about two weeks the eggs hatch into white threadlike larvae. Born blind, a larva uses its senses of smell and touch to find food. The first meal is easy; it eats its own eggshell. After that it dines on dried blood, excrement, plant and animal matter. About two weeks later the glands in the mouth area produce a silk-like material which is spun into a cocoon. This is the pupa stage. A week to 10 days later it becomes an adult flea.

Then perhaps your dog comes along. As the dog walks he causes vibrations which the flea can feel. Also, being sensitive to warmth, the body heat produced by the animal tells the flea in which direction to jump. In no time at all it has latched onto a free meal ticket for life—your dog.

The question now is how to get rid of these flea free-loaders. Without getting rid of your dog. Since fleas are found almost everywhere—in the grass, woods, and on both wild and domestic animals—do you adopt a live and let live philosophy? Perhaps you feel as David Harum, a character out of a book written by Edward Noyes Westcott did: "A reasonable amount of fleas is good fer a dog—keeps him from broodin' over bein' a dog."

Now some people might find this amusing, but if you read it to your dog, I doubt that he'd roll on the floor and howl with laughter. He'd probably be too busy scratching. It makes more sense to control fleas, one reason being that they can serve as the intermediate host for dog tapeworm. Another reason is to prevent your home from becoming infested. A local exterminator claims that during the summer months he has more calls from people whose homes are infested with fleas than any other insect.

How do you control fleas on your dog? It is necessary to treat both the dog and his sleeping quarters. There are many aerosol sprays, dust sprays, dips, flea soaps, and flea collars on the market which will effectively kill fleas. The eggs, larvae, and pupae must also be destroyed by cleaning and treating the places where they develop with a residual insecticide. The important thing is to use these products regularly.

Perhaps this isn't everything your dog has always wanted to know about fleas. But someday after you've bathed him with flea soap and cleaned and sprayed his bed, sit down and read it to him. If nothing else, it might give him something to think about—besides just "broodin' over bein' a dog."

HUNTER EDUCATION

By John C. Behel
PGC Hunter Education Coordinator



DGP GENE UTECH EXPLAINS functioning of rifle to youngsters taking HE class at Carlisle Barracks, as Col. A. H. Wagonhurst watches.

Fine Safety Record Compiled

ANOTHER FINE safety record was compiled by Pennsylvania hunters in 1974, according to a Game Commission tabulation.

Records show that last year there were only 349 hunting accidents among the 1.2 million hunters afield in the Keystone State. The total was the second lowest since 1945, when there were only about half as many hunters in Pennsylvania as there are now. Of the 1974 mishaps, 23 were fatalities, four of them self-inflicted.

The hunting accident rate has dropped sharply in the state since 1968, when hunter education became mandatory for all youths under the age of 16 before they could purchase a hunting license. There were 530 Pennsylvania hunting mishaps in 1968.

Mandatory hunter education for youths plus increased use of daylight fluorescent orange safety material by hunters is believed responsible for the big reduction in the number of accidents.

Last year four persons who were wearing red colors were mistaken for game and shot, while 29 victims who were mistaken for game were not wearing any safety-colored clothing. Forty-five hunting accident victims were wearing the old traditional red and were not seen by the person who caused the injury. Another 52 victims not wearing safety-colored

clothing were not seen by the shooters.

For years the Game Commission has urged hunters to wear fluorescent orange while afield, and has asked the legislature to require hunters to wear fluorescent orange.

Last year there were several unusually tragic accidents that should never have occurred. In one, a 12-year-old hunter was forbidden to wear fluorescent orange by other members of his hunting party. The youth was fatally shot in mistake for a turkey by a companion.

In another instance a hunter was fatally shot in the chest in mistake for a turkey. His companion, who did the shooting, fired from a distance of only 93 feet, 7 inches. The shooter was using a rifle equipped with a 9-power scope.

Fully one fourth of the accidents in the mountainous north-central part of the state involved victims who were shot in mistake for game.

Most of the hunting accidents involving young hunters showed a disturbing pattern: the youths were not being properly supervised by the adults who were accompanying the youngsters.

Hunter Education — More Than Gun Safety

HUNTING ATTRACTS more and more people into the countryside each year. Its popularity is gaining—not waning. With the increasing numbers of outdoorsmen, there is also a need for each and every hunter to be armed with more than a gun and ammunition—each should have a hunter's education.

At Townville Elementary School, Crawford County, hunter education is taken very seriously. So seriously that it has been built into the school curriculum during the past 12 years.

In 1962, two teachers, Al Whitlatch and Jack Randall, began instructing in hunter education on Saturdays. More than 1200 youngsters have successfully completed the course since that time. In 1963 the course was formally adopted into the school curriculum. This made it mandatory for all sixth-graders. Townville Elementary was the first school in Pennsylvania to take this important step.

The course consists of 10 sessions taught in five weeks during the fall and is still conducted by Al and Jack. They were joined four years ago by Ken Bender.

"Is there really a need for this?" was my first question. "Half the young people that take the course are girls; very few of them will ever hunt. And half the boys will never become interested in hunting."

Mr. Whitlatch responded by saying, "The course serves a definite purpose. It's not designed only for potential hunters, although all Pennsylvania hunters under the age of 16 must have a certificate of competency. We cover more than just the hunting aspect. Gun safety in the home is strongly stressed. Outdoor survival and conservation are two other subjects that we discuss."

"Respect of a firearm is the most important thing," Jack Randall said. "We try to impress upon our young people what firearms can do. The use of films really helps in this aspect. We instructors conduct a gun demonstration, but there is no gun use by the students."

As in every program, there is a degree of effectiveness or ineffectiveness. The Townville Elementary School's program speaks for itself: 1200 youngsters have gone through hunter education, and only one accident can be directly traced to a youth having completed the course. That's quite a record!

(From the Penncrest School District Newsletter)

PENNSYLVANIA GAME COMMISSION

A DIGEST OF INFORMATION COMPILED FROM REPORTS OF HUNTING ACCIDENTS 1974

CASUALTY

Fatal	
Self-Inflicted	4
Inflicted by others	19
Non-Fatal	
Self-Inflicted	78
Inflicted by others	248

SPORTING ARM USED

	Fatal	*Non-Fatal*	
Shotgun			
Self-Inflicted	3	31	34
Inflicted by others	4	196	200
Rifle			
Self-Inflicted	1	23	24
Inflicted by others	15	50	65
Revolvers			
Self-Inflicted	0	14	14
Inflicted by others	0	1	1
Bow and Arrow			
Self-Inflicted	0	10	10
Inflicted by others	0	1	1

BIRD OR ANIMAL HUNTED

Upland Small Game	9	249	258
Deer	10	57	67
Bear	0	0	0
Woodchuck	3	14	17
Others	1	6	7

SAFETY COLOR WORN BY VICTIMS

Fluorescent Orange	115
Red	119
Yellow	6
None	109

AGES OF VICTIMS

Under 12 years of age	5
12 to 15 years of age	48
16 to 20 years of age	86
21 years of age and over	207
Age not reported	3

AGES OF PERSONS INFLICTING INJURY

12 to 15 years of age	31
16 to 20 years of age	49
21 years of age and over	123
Age not reported	64

CASUALTY CAUSES

Sporting arm in dangerous position	22
Accidental discharge	61
Ricochet or stray	101
Victim in line of fire	95
Hunter slipped and/or fell	23
Hunter dropped sporting arm	2
Shot in mistake for game	35
Sporting arm defective	9
Using sporting arm as a club	1

PLACE OF ACCIDENT

Fields	81
Brush	90
Open Woodland	75
Dense Woodland	69
Water	0
Conveyance	2
Camp	5
Wood Road or Public Highway	27

SUMMARY OF ALL CLASSES OF 1974 HUNTING ACCIDENTS

FATAL ..... 23 *NON-FATAL* ..... 326 *TOTAL* 349

SUMMARY OF SAFETY COLOR WORN BY VICTIMS

	Fl. O.	*Y.*	*R.*	*N.*
Victim mistaken for game	1	1	4	29
Victim not seen by offender	0	3	45	52
Color not factor in hunting accident	114	2	70	28

SCORING and PULLING

By Susan M. Pajak



PHYLIS VOJTEK adds up scores as Beverly Cromling, Jolene Folk, Betty O'Bryon and Carol Cant await results of their round of trap shooting.

HANG AROUND a trap range long enough and someone is sure to shove a clipboard into your hands and say, "Here, you keep score." When that happens you have two choices—either shove it back or do like the man sez . . . keep score!

Just scoring for a squad of trapshooters, though, isn't nearly as excruciating as is "pulling" for one, a function to be explained shortly.

Briefly, the job of a scorer is to stand, or sit, near the "puller," or referee, and record on a scoresheet the shooter's dead claybirds (ones shot at and hit) and the lost, or missed claybirds, as the referee calls them out.

Where I shoot, dead birds are scored by marking a distinct 1 (one) in the appropriate square; in other areas, scorers often make a diagonal mark connecting the top right and lower left corners of the square, while still others make an X. A lost bird is recorded with a distinct zero. Only dead claybirds count for the shooter's score.

Our scorer also calls the "changes"; that is, after the No. 1 shooter, or lead-off man, completes the fifth shot at each of the first four positions the scorer will call "Change one." This is a signal that when shooter No. 5 completes her fifth shot the squad will move to the next shooting position at the call from the scorer who will say "Squad move."

On the last, or fifth position, and after she shoots her last, or twenty-fifth bird, the scorer calls "Out one," which means that the No. 1 shooter in the squad has completely finished shooting the round and the squad is now out one shooter.

After each member of the squad has completed shooting at 25 birds, the scorer calls "Squad out," which means that all shooters are now finished with the round and can move away from the shooting line.

(Note: As the members of a squad are moving from one position to the next, the scorer may call out the results of the shooting just completed. For example, on a change of position you may hear a scorer calling out "Five, four, four, three, five," meaning that shooter No. 1 has broken all five claybirds, shooter No. 2 broke four and missed one, etc.)

The word "puller" is just a moniker for the formal title of referee. The referee is the person who presses the button on the electric release which activates the trap and throws the claybird when the shooter calls for it. The referee is the only person authorized to call a claybird

GIRLS, GUNS, & GAME...

"dead" or "lost," no matter how many other spectators, or shooters, think they see a tiny chip that the referee didn't. It only takes a chip off the claybird to make a hit instead of a miss; however, what is seen must actually be a piece of the 'bird and not the wad from the shotshell.

Therefore, a referee must not only have good eyesight to see any possible chips but must also have good coordination to press the button the instant the shooter calls for it and not even a half-second later.

Claybirds on occasion are released "too fast" or "too slow," although the referee honestly doesn't mean to do either. Once in a while he will overhear another shooter on a neighboring squad call for his bird (and I mean to tell you some guys sound like they're having labor pains when calling for their birds), and inadvertently press the button which will release the claybird before "his" shooter has called for it. Or the referee can just get a case of nervous thumb-itis and release it too soon.

On the other hand a referee who pulls too slowly—waits just a split second too long before releasing the claybird after the shooter has called for it — will probably be replaced quickly by the management, or will be tarred and feathered if the squad gets ahold of her first. (Sorry, Otto, it won't happen again.) The button must be pressed the instant the shooter calls for the bird.

Incidentally, one person may be assigned to do both jobs in a trapshoot—that of scoring and pulling—particularly in practice shoots, but the management of most clubs will probably assign two persons to work a squad, one to pull and one to score.

For a newcomer at scoring and pulling, doing one or the other is plenty. Trying to do both at one time can drive you straight up a wall!

Pen Pal: Keith Singer, 14, of 22 Spruce Street, Natrona, Pa. 15065.

1975 NRA Conservation Yearbook, Ruth Sievers, ed., National Rifle Association of America, 1600 Rhode Island Avenue, N.W., Washington, D.C. 20036, 96 pp., $4. A comprehensive source book of wildlife and its related habitat on the North American continent. Ranging from the caribou of Alaska to the cypress swamps of Florida, the in-the-news issues of wildlife management are presented in a straightforward fashion. Pennsylvania is well represented by Roger Latham, discussing strip mining, and a discussion of the white-tailed deer by James Lindzey, Bob Wingard and Mike Ondik, all of Penn State University. An excellent appendix includes a listing of the private and governmental agencies concerned with natural resource management, and a listing of motion pictures relating to conservation and natural resources. A must for libraries, teachers and all serious conservationists.



DONALD WALKER, OF SOUTH FAIRVIEW, is one of many Pennsylvania hunters who enjoy using flintlock rifles and oldtime equipment.

There's Some "Mountain Man" In All of Us

By Les Rountree

NO MATTER HOW urbanized we become there is always that inner spark of our ancestors that burns in an obscure corner of the brain. Some of us hunt, camp and fish because it's the social thing to do. Others are drawn to outdoor pursuits because we can't help ourselves. It has nothing to do with being "macho" or "cool." We are drawn to the wild places as surely as the candle draws the moth. To do what? To walk where no man has ever set foot? Hardly possible today . . . but we dream about it. To sit beside a campfire and ponder? Ponder what? The stars in the sky or that rather bad plate of beans? We don't really know why we do these things but we'll do them again whenever the spirit moves us.

Has it finally happened? Has Rountree finally come unglued? Has a case of the July vapors scrambled his brain? (Possibly.) The real reason for those opening thoughts is the result of re-reading Bernard DeVoto's 1942 book, *Year of Decision.* In this effort, DeVoto got all caught up with some memoirs that had been set down by one James Clyman. Cly-

man was a Virginian who went west at an early age and never came back.

Clyman headed for the Sierras when the 19th century was in its infancy and knew the high country of the Pacific better than any white man had before him. Using his journals and the scattered remnants of other mountain men of the early 1800s, DeVoto pieced together a masterful picture of what the lonely life was all about. No easy task, for with the exception of a handful like Clyman, few of the singular types who took up the mountain life of trapping, hunting and trading with the Indians could read or write.

Survive Today?

As writers often do, I find myself borrowing from others whom I particularly admire or when some special passage kindles a flame. DeVoto inspires me both ways. First of all, he wrote with great force and style. And he wrote, in this case, about something that I have long wondered about. Could such an existence be possible today? Putting income taxes and all of the other rules and regulations that society has made necessary aside, could a person set forth into a vast reach of wilderness and make it? Could he survive for a year, a month, even a week? There are some who could do it, I'm sure. Could you? Could I? What a romantic thought!

Some years ago, "National Wildlife" magazine asked outdoor writer Pat Snook to try it. He and his wife spent a week on an uninhabited island in Lake Superior with the barest of equipment. They had no food, just a knife and the clothing on their backs. They made it but





HOW FAR ARE we removed from our pioneer beginnings? How many of us could survive a week in the woods with the barest of equipment?

Pat agreed that he would never try such a stunt again. It was more than tough, it was an ordeal.

I have lived alone in the woods on several occasions for periods up to two weeks but I always had some luxuries available. But consider the mountain man. With knife, muzzleloader, and the deer skins on his back, he not only survived, he thrived in many cases. Clyman made it to age 89. In fact, most of the famous mountain men died of old age unless they were prevented from reaching it by an Indian arrow or warclub. The straight meat and berry diet must have been nourishing.

Jim Beckwith, another mountain man of the early 1800s, said that though the Indian could never become a white man, the white man could easily become an Indian. Another century may prove that wrong but it was true then and it is still true today. No matter how much they may want to, most Indians do not take well to high rise apartments or soft

ice cream stores. One hundred years ago they didn't embrace crowded reservations or the white man's religion. The mountain men understood this perfectly and they didn't try to change it. They adapted to the Indian ways and made the most of it . . . with some variations of their own.

When I was a small boy, I used to spend most of my summer days "camping out." I built lean-tos by the dozen and tepees too. With my air rifle and the bone-handled hunting knife I "won" for selling magazines, I stalked at least a hundred grizzlies, cougars and wolverines. The camping trip was always over every day at supper time but it would be continued the next day.

As adolescence arrived so did the Boy Scouts and I went through the motions of being part of the group but going "on your own" was still the big thing. A taste of it now and then during teen years took me on overnight jaunts into the Hammersley Fork and Birch Run to pester the tiny brook trout that lived there. More tent life in the army. A few backpacking trips in recent years with down and nylon equipment . . . but, it still isn't the same as the sort of life DeVoto wrote about. Maybe it isn't possible. And, just maybe it is.

A DRINK FROM a cool spring with a leaf as a cup is a small but meaningful experience. Who drank from this spring three lifetimes ago?



The biggest reason I'm writing this is to build up enough courage to try a solo jaunt this summer. It won't prove anything to anyone except myself but I want to learn first hand what it's like to be *really* on your own with nothing more than a knife, one set of clothing, some matches and—this may be cheating just a little—a package of fish hooks and some line. A day or two won't prove anything. It's got to be a week or nothing. Maybe I'll chicken out. But if I pull it off you can bet that GAME NEWS readers will be the first to know.

No Thoreau

Now I'm not about to give up on civilization and pull a Thoreau. I'm not that much of a recluse. I just want to try the most basic sort of outing that is possible and maybe learn something. I'll bet I've sparked a thought or two among readers. Be honest now, aren't there some moments when you are alone in the woods or on a mountain top that a certain primitive feeling tries to come to the surface? It may not be recognizable at the moment but sometime later the memory of the occasion is recalled and you say a sort of muffled "Wow" to yourself. That was really a great day, wasn't it? It's almost impossible to put your finger on why it was a great day. Maybe it was the spectacular sunset. Perhaps it was the yelp of a turkey gobbler or a dozen other manifestations of the wilderness. What triggered the feeling is not too important. The mere fact that it was there, just may be what keeps a lot of us sane in this computerized life.

As we are about to embark on our year-long observance of our nation's 200th anniversary, it might be a very

good time to reexamine what a walk in the woods meant in earlier times. There were some monumental "walks in the woods" taken by our revered heroes. Washington did a lot of it. So did Jefferson. Louis and Clark probably made the most significant camping trip of the last century. They, quite literally, *found* the United States west of the Mississippi for an expanding nation. The ultimate use we made of their discoveries are yet to be fully decided by historians. Admirals Byrd and Perry made camping trips too and wound up by being the first Americans to sit at the opposite ends of the world.

There may not be many new frontiers to explore these days. That is, of an historical nature. But every trip we take is new as far as the hiker is concerned. We can set foot on spots where we have never been and that in itself is a discovery. Our eyes and brains are original with us. No two individuals are alike in their reactions. When a new hiker sees the Pennsylvania Grand Canyon, for instance, it is in effect being seen for the first time.

The mechanized way that most of us camp today can stifle us if we let it. When the motor home or trailer is parked at a campground that features hot showers, flush toilets and organized activities for the kids, we run the risk of losing that "inner spark." There is a danger of being lulled into believing that this is what it's all about. Fight off the feeling to sink comfortably into the comfy lawn chair that you have carefully packed and take a walk beyond the campground to see what lies on the other side of the hill. The feeling is there, you know it is, you just have to let it come to the surface.

It has been stated by philosophers, far more eloquently than I can phrase it, that we have grown too far away from the land. Not just city dwellers but the vast horde of suburbia too. Not a few small town and country folk have also become too caught up in our packaged and synthesized

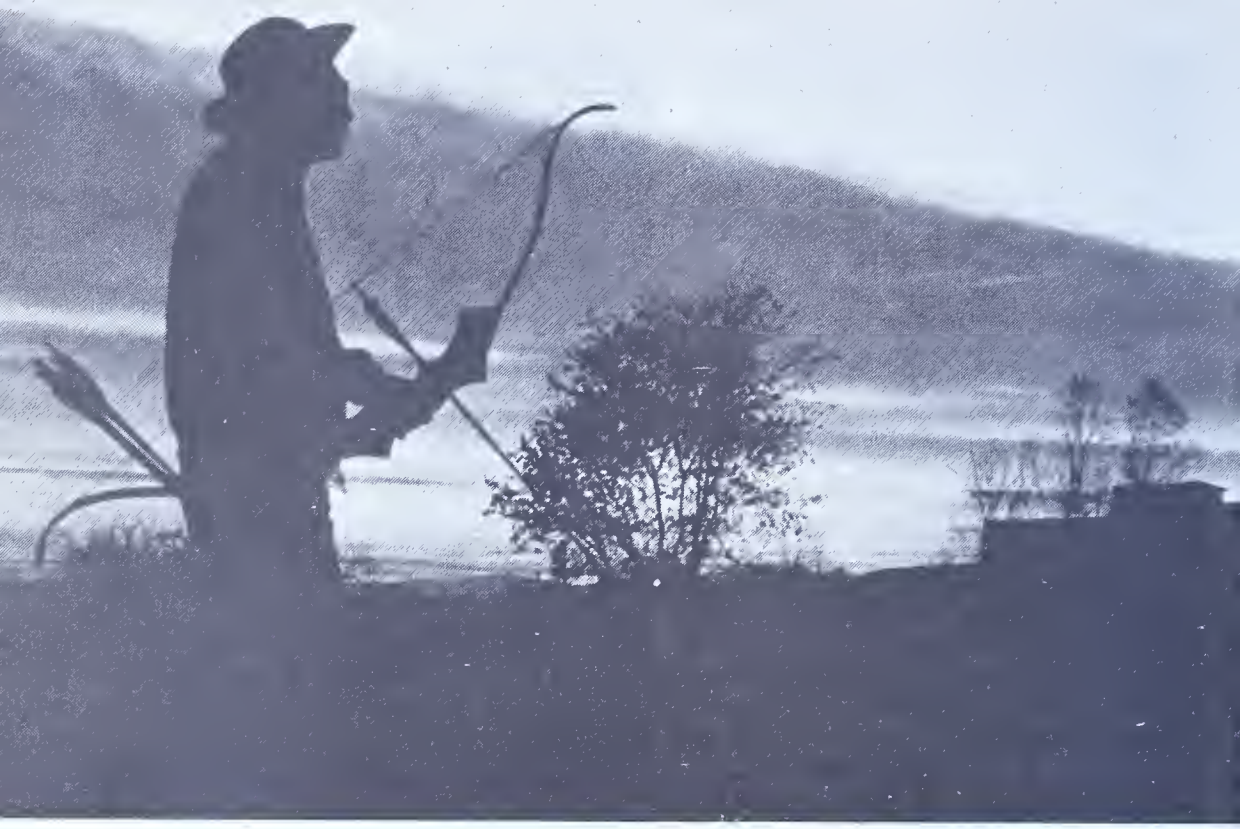


THIS IS A primitive camp by today's standards but probably far more luxurious than most of those used by mountain men of the early days.

world. A plain old walk in the woods is a good tonic for it.

That walk doesn't have to be the one-on-one survival trek that I have my sights set on this summer. It can be nothing more than a one-mile hike to the top of the hill or the end of a shaded valley where the most exciting activity will be to sit on a log and contemplate the moss on the nearest tree. Most of your serious problems are either solved or, at the very least, temporarily forgotten by doing this. Psychiatrists understand this self-appraisal technique as being good therapy today. The mountain men knew it a long time ago.

Stealing from DeVoto again: "They had learned not only to survive the big lonesome but to live there at the height of function . . . the road back was always there and need only be followed eastward. Few ever took it. They were—by God!—the mountain men."



MORNING IS THE BEST TIME FOR archers to hunt chucks, so Schuyler advises getting out before the sun gets high.

CHANGE FOR CHUCKS

By Keith C. Schuyler

Photos from the Author

DEPENDING UPON when you normally do your bow hunting for woodchucks, the new specified season for this animal may or may not have special significance. However, it does point up that the woodchuck is a game animal under protection of the Pennsylvania Game Commission. The fact that this year it may be hunted only from June 16 through November 29 emphasizes this point.

Otherwise, things haven't changed much. Since there was no season on the chuck for a number of years, however, the special regulation does indicate that a new look is in order for those who include groundhogs in their bow hunting plans.

Such things as time, travel, meat, foliage and safety deserve consideration. *Marmota monax* takes on new importance for any or all these reasons, if you enjoy hunting him with any type of arm.

Time is always a great consideration, since everyone seems to have so little of it. This business of time can be extended to the individual day as well as the season of the year. On daylight saving time, those who work a normal shift have little chance to get out in the morning. Morning is an excellent time to take groundhogs, for there is much less activity afield and the animals pop up from their burrows as soon as the sun warms the landscape. Those working late or staggered shifts can take advantage of the morning hours. Most, nevertheless,

will be forced to go in late afternoon, the second-best time to take him.

June through August are the months favored for vacations. The last half of June certainly ranks high among best times to hunt woodchucks. If your vacation is in an area where they are found, you can grab some extra pleasure out of the time.

Unfortunately for those who also enjoy fishing, the best hours for both sports sometimes overlap. But, since fish often go down when chucks come up on the better mornings, and they swap ups and downs in late afternoon, it is possible to get in the best of each in any one day if you are in good woodchuck country. An observant angler will frequently locate woodchucks when fishing either from a boat or when wading a stream. Mentally marking their locations can provide for extra sport.

Travel is becoming more of a problem with the emphasis on conservation of energy as well as the cost of ignoring it. Although groundhogs seem able to get by on moisture from the succulent plants they eat as well as morning dew, they do frequent ditches and creek banks where water is easily available. It is a good excuse for those who fish and hunt to share the same gas tank in getting to their sport.

In every hunting sport, with the exception of most predators, meat is an important consideration. Utilizing the carcass of any game taken in the name of sport helps hold down criticism from the anti-hunters as well as providing an important source of food. Woodchucks with their impeccable feeding habits provide excellent food for the table. They may be a bit fat toward fall, but it is no great problem to trim the meat to eliminate



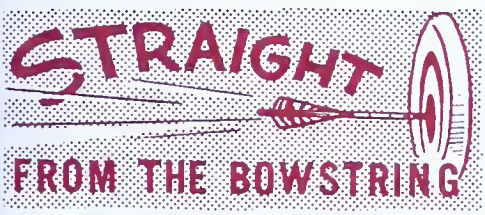
THIS ALERT WOODCHUCK seems to be saying, "I'm game, and don't you forget it." New hunting season, which gives young chucks a chance to get going on their own, stresses this fact.

these extra calories. Certainly woodchuck meat compares well with most $1-plus-per-pound offerings at the super meat market.

Foliage is important to those who get out early before cover has a chance to grow much around woodchuck dens. Although summer growth does make it difficult to get open shots at chucks, cutting of hayfields works to the advantage of those looking for open shooting.

Tramping through such fields before they are cut is bad manners and should be avoided at any cost. Hay is frequently next to grain which is still uncut when the first hay is made. After hayfield cover is gone, the animals will often use the standing grain as cover to get to their holes. Knowing the path they take will many times put you into position for good shooting. Further, fresh cutting often reveals holes that were made while the cover was growing. Farmers are only too happy to have you remove these excavators; they can be a source of trouble to livestock and machinery.

The later season will require special attention to personal safety as well as consideration for others. A fluorescent-orange cap or vest will





FOLIAGE IS heavier in summer than in spring. This makes chucks harder to spot but also provides concealment for stalking bowman.

identify you to other hunters, particularly the long-distance gunners.

Since summer is a time for many activities, keep in mind that others will be utilizing the outdoors—many of whom are unaware of hunting activities. Since most shots are relatively close with the bow and arrow, the danger is minimal. However, ricocheting arrows can be a menace if the overshoot area is not clear. Shots should never be taken where final point of impact is in doubt, as on the crest of a hill.

Later in the season, as the first apples begin to drop, orchards have a special meaning for chuck hunters. Bases of old apple trees are favorite spots for these creatures to dig their tunnels, possibly in the knowledge that sooner or later excellent eating will become available. Although groundhogs are usually found close to their burrows, they will sometimes travel considerable distances to take advantage of dropped fruit.

A new consideration today is the number of people planting gardens because of high prices at the grocery store. Groundhogs primarily feed on clover and grasses. As with other wild creatures, they like to vary their diet when change is available. Once they get started on a garden, they can completely clean it of any crops. As a bowman, you may rate a special welcome from the owner, particularly if he is not familiar enough with firearms to appreciate their presence. There are areas, too, where just the sound of shooting may be upsetting, even though the gunner is completely capable and safety oriented.

The previous thought should emphasize the importance of getting permission wherever you plan to hunt woodchucks. Even though the landowner may welcome removal of the animals, most property owners are interested in knowing who is on their property. This can be an advantage to the hunter since the landowner is unlikely to tolerate more than one or a few hunters on his property at any one time. You don't need competition.

Specialization Required

Those new to bow hunting or to woodchuck hunting should give thought to the tackle they plan to use. It might seem that any bow and arrows would be appropriate for an animal that seldom exceeds 10 pounds in weight. But there is much more to serious woodchuck hunting than simple target practice. Any success beyond the occasional lucky shot requires some specialization.

The woodchuck is a compact and tough animal. It takes heavy tackle, something comparable to what you might use for a deer that may weigh 10 to 20 times that of the average chuck. Furthermore, despite its lazy

ways, the woodchuck can move lightning fast in certain situations.

Many shots are taken when the chuck is sitting erect close to or in the entrance to its burrow. Since an arrow at best is traveling no more than 200 feet per second from a *fast* hunting bow, the sound of your release will get to the animal five to six times faster than the shaft itself. Bow shots at the pasture pig are seldom more than 100 feet. If arrows are from a fast bow, they will get there in something over one-fifth of a second. If a chuck *hears* your release, it may have time to drop to its belly or into its hole.

Sees Movement

Although a chuck has the usual difficulty of most animals in distinguishing a motionless object, its eyes are quick to pick up any movement. Consequently, if it sees your release, it has the full time of the arrow's flight to get out of its way. Your chances of taking woodchucks with a slow bow are slim. Unless you are a top shot and can shoot from distances far enough away to preclude the animal either hearing or seeing your release, you won't make many scores.

The recommendation here is for the heaviest bow you can shoot with accuracy. A woodchuck is a relatively small target.

When it comes to arrows, you have a wide selection among aluminum, fiberglass and wood. Only the brave will risk their expensive aluminum shafts against the frequently stony ground inhabited by chucks. These creatures love to burrow under stone walls and any other pile of rocks that lends protection. For the same reason, price, you might hesitate to use the somewhat more economical fiberglass shafts in your collection. This leaves wood. This is entirely adequate for the job, assuming the arrows are spined to your bow and your draw length. Using old junk arrows is self-defeating. Unless they are remnants of matched sets which shoot well, you are likely to come up a loser.

Wooden arrows can take about as much punishment as either of the others. But if they do lose to a rock, or go skipping off to hide somewhere, the loss is not so great.

The business end of the arrow should be pointed with a regular broadhead. My favorite for this hunting is a bodkin point with an abrupt trailing edge. Woodchucks have tremendous vitality for their size. Aside from the greater shocking power of the solid three-bladed head, the squared-off trailing edge provides leverage to pull the chuck from its hole, if necessary, when the arrow can be reached.

The proper common name for our quarry, "woodchuck," should be a clue that not all such animals are found in hayfields, stone rows and apple orchards. There were no cultivated hayfields or stone rows when the first settlers found the "little pig" in America. True, then as now they abounded where there was good



THE WAITING GAME can also provide shooting at woodchucks—though it's frequently a long warm wait between chances at this wily species.

food nearby, but it didn't take them long to discover that cultivated crops provided easy eating. So they moved out of the woods to take up residence near human habitation. Even today some of the best hunting is in wood patches surrounded by farm land. Foxes prey heavily on young woodchucks and adults tend to seek sheltered areas where such is available.

Excellent Table Fare

Although all woodchucks provide excellent table fare, it is natural that young of the year are the best eating. In the latter part of the season, these youngsters have acquired enough size that they are more sought after by those who relish their flesh. They stay in the same burrows for much of the first year. Consequently, if you find one you can likely come back and score again at the same site.

Although the subject has been covered here before ("Dinner Date," July, 1972), there are many ways to prepare woodchucks for the table, all of them excellent. It should be kept in mind that it is important to properly care for the meat in the hot summer months. It is a good idea to clean animals on the spot, making sure that the offal is placed where it will not offend.

More favored hunting takes over in the later months of the season, but many an arrow, delicately spined and set up for deer, has been shattered against a rock when the hunter could not resist a try for a groundhog that tried to share a deer stand.

Setting a season for the old groundhog gives him new status on the hunting scene. But it is unlikely that it will make any difference to this clover clipper who is as typical to Pennsylvania as laurel blooms and maple leaves.

Recall of 303 British Rifle Ammunition

Federal Cartridge Corp. is continuing its efforts to recall certain lots of caliber 303 British rifle cartridges marketed under several brand names. When used in some rifles, these cartridges can rupture, causing damage to the rifle or serious personal injury.

The ammunition was manufactured over ten years ago and has been the subject of previous recall efforts. However, recent reports indicate that some of the original rounds may still remain in the hands of hunters. Anyone having 303 British ammunition with a headstamp on the brass cartridge case reading FC 303 BRITISH should check the lot numbers which are printed on the rear or inside the end flap of the box containing the ammunition. Lot numbers being recalled begin with the number 36 (for example, 36B29W303-A) or a letter and 36 (for example, S36A6W303-A). Boxes for such cartridges may carry these brand names: Federal, Hawthorne (Montgomery - Ward), Revelation (Western Auto), Sears - Roebuck and American Eagle.

Persons having this ammunition should not use it. They should call 800 - 328-8624 toll-free or write to: Federal Cartridge, P.O. Box 231, Anoka, Minn. 55303 for proper return instructions and refund information.

The company emphasizes that only 303 British rifle cartridges as described above — and no other ammunition manufactured by Federal Cartridge — is involved.

Scorpio Arising

Scorpions are immune to their own poison, so they cannot commit suicide if cornered, as was once believed.

Stop Agonizing Over . . .

The Best Varmint Outfit

By Don Lewis

Photos by Helen Lewis

DURING THE COURSE of a year, no less than two dozen beginning varmint shooters contact me about getting a custom-made, long-range varmint rifle. Note I described the rifle as a custom-made, long-range outfit. These are usually the very words used, and these two terms cause a good bit of anxiety among woodchuck hunters, especially those just getting started. My point in writing this article is not to discourage these hunters, but to throw in some practical, common sense type of thinking on this subject.

Until I left for the military service in 1942, all my chuck hunting had been done with the common 22 rimfire. Sometimes a friend would share a 25-20 or a Winchester WRF, which we called the 22 Special, and these faster outfits always made me yearn for the 22 Hornet which was then in its heyday. Financial conditions kept me yearning instead of buying, but for the most part I was happy with the little rimfire and accounted for a good many chucks that allowed me to get close.

After my discharge, a vintage Hornet replaced the rimfire cartridge, and I was finally set to do battle beyond the 50-yard mark. Scoping it with an inexpensive 4X made chucks unsafe up to 125 yards. Really living it up, I ordered a 218 Bee in the Winchester Model 43, but a Hornet came in, and I was so anxious to use a new rifle for a change that I refused to reorder the Bee.

There's no point in explaining in detail how I eventually ran the gamut of varmint cartridges and rifle models, but I should point out that power and distance were paramount goals with me. Although my early successful shooting had been done at close ranges, I had fallen victim to the long-range philosophy. My thinking pointed more toward speed and distance than to becoming a first-rate chuck hunter. The desire to reach way out was so strong that I seldom gave thought to things pertaining to good hunting and shooting techniques. All I was interested in was getting a shot across as much space as possible.



LEWIS HOLDS one of Bill Dryfield's benchrest guns. Remington 221 Fireball action has been sleeved by Clyde Hart, had its bolt handle altered, with Hart barrel and fiberglass stock fitted.

I've explained how I made a 180-degree turn in my varmint hunting philosophy when I scored on a big



BILL DRYFIELD examines target shot from Lewis's indoor bench. Rifle shown won Super Shoot 2 for Bill, competing against nation's top gunners.

chuck at long range only to discover I missed the aiming point by a half foot or more. That's when it dawned upon me varmint shooting was concerned with more than just long-range, powerful centerfire ammo. Had I continued this unwise course, I doubt if I would have a varmint rifle today. Going for long range and sheer speed made me unappreciative of the potential offered by the Hornet, Bee and 222. I was interested in fancy outfits like the 243-06 or 257 Improved. Such cartridges put me in another class, or so I thought.

Eventually I saw varmint shooting in the proper perspective. I became acutely aware there was nothing wrong with any of the cartridges so long as each fit a particular purpose. In my quest for distance, I passed up many a 175-yard shot where the accurate 222 Remington would have been right at home. I even gave disdainful looks to the hunter with a less powerful cartridge, and I couldn't understand how anyone could enjoy that type of hunting.

When I laid my hands on my first custom outfit, I was on cloud nine. Not that it was expensive, but because it carried the impressive chambering of the mighty 25-06 Improved. That's nothing more than a conventional 25-06 (it wasn't on the market then) fireformed to a sharper neck angle. Pushing out the shoulder a few degrees gave a slightly greater powder capacity, but I still doubt if it's of any real significance. I learned this when Remington standardized the 25-06 and my test results from the chronograph and on the range were nearly the same.

There are several schools of thought in buying a varmint rifle. By all means, the prospective buyer should know in advance what is needed. I think the biggest decision is deciding between a regular hunting rifle and the heavy-barrel varmint model. The hunting rifle, if of proper chambering, can be used for either big game or varmints. There's nothing wrong with this except the new owner never quite has a true varmint rifle. Many years back, I stopped searching for the combination outfit. I noted carpenters used different hammers and saws for special work, and I applied this thinking to the hunting scene. In other words, I felt better varmint results would be obtained by sticking with an outfit designed primarily with the varmint hunter in mind. A conventional rifle will turn in a fine performance, but over the long run the true varmint model will prove the wiser choice.

I don't want to be misundersood and give the idea I'm condemning the hunter who uses a 243, 6mm or 25-06 for both types of game, but I think the advantages found in the varmint model are worth thinking about. For instance, the extra weight alone will



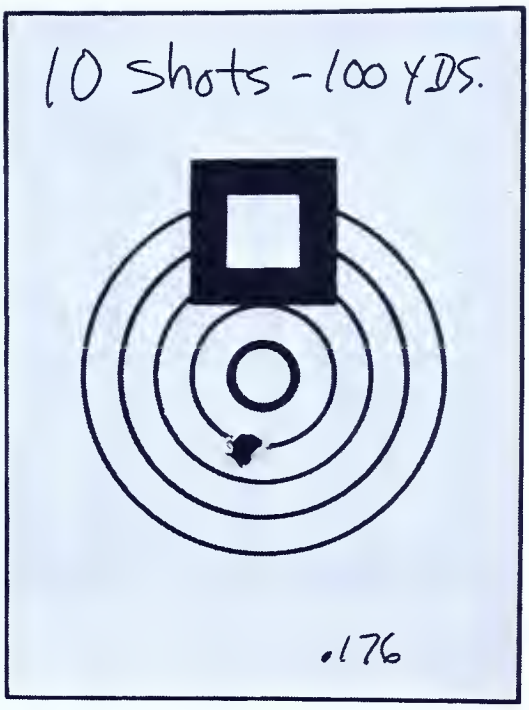
prove its worth constantly on shots beyond 275 yards. Normally, the varmint model either has an adjustable trigger or is designed to accept one, and this, too, is of utmost importance.

I believe instead of spending a lot of time worrying about a custom outfit or some super cartridge, the rifle's external design should be the number one priority. If a straight factory model is decided upon, it would be best to handle as many as possible, along with getting brochures explaining the physical characteristics. A straighter stock may be desired if most of the shooting is done from the prone position. The hunter using some type of rest should look for a flatter forearm and a stock without a high comb. These can easily be incorporated into a genuine custom outfit if the owner knows in advance not so much what he wants, but what is actually needed.

40-oz. Pull Okay

I've already mentioned an adjustable trigger, but I do want to clear up the misconception about these. Contrary to a positive belief that runs strong in inexperienced varmint shooters, the adjustable trigger is designed for more than just reducing weight of pull. There's more to a good trigger than how light it can be set. On this subject, I don't advocate getting far below three pounds. Entering that 1½-pound class adds an element of danger. It's true the bench shooter works in the few-ounce class, but that's a horse of a different color. No varmint shooter will find a 40-ounce pull excessive.

Many times it's more of a psychological factor than a necessity which motivates us to look for custom made or highly specialized outfits. I know this from a good many years spent in frustration looking for the perfect rifle. In truth, it does not exist. I have had hundreds of varmint shooters ask for advice on building a custom rifle suitable for any and all situations, and I've seen hundreds of dollars spent for rifles that didn't perform



ONE OF DRYFIELD'S heavy bench guns fired this group at 100 yards—10 shots measuring .176″ center to center of the widest holes. Such groups must be measured with special optical equipment.

any better for the owner than a factory varmint model costing half as much. Here again, I must caution the reader that a superb custom rifle will outperform the factory model to some degree, but the difference is usually more noticeable on the range than under hunting conditions.

My point is not a condemnation of the custom-made outfit, but to say that the factory varmint rifle will meet the most demanding needs. I'm not overlooking the fact that any rifle which will cut half-inch groups at 100 yards from the bench will offer the same accuracy in the field, but many times the load used to get super groups would not be suitable for long-range shooting. Then there's the additional cost of special bullets, the time involved spinning them to determine how many are perfect, and painstaking handloading. The chuck hunter can do all this, but it's unlikely hunting results will improve to any great extent.

Remember, the dedicated bench-



FOR LONG RANGE varmint shooting, Lewis prefers heavy barrel bolt action or single shot models with target scopes and fully adjustable triggers.

rester is in a class by himself. First, all his shooting is done at known ranges, and time is available for wind study and the like. Secondly, the load being used has been tested a dozen times over, and years of experience have taught the benchrest shooter exactly what to do in every situation. None of this is really true with the varmint shooter. Distances vary and wind gusts in valleys and pasture fields are next to impossible to evaluate. Unlike the target shooter who uses moderate loads, the 350-yard field shot requires a higher velocity, and this to some extent adversely affects accuracy.

250-Yard Accuracy

Every varmint shooter worth his salt wants a one-hole shooting outfit, and no one can criticize that desire, but it is incorrect to believe that only the custom job is the ultimate for varmint shooting. When I ran tests on six factory 22-250 heavy-barrel rifles, not one gave a bad showing. Not all worked equally well with the same load, but I did learn factory fodder gave adequate accuracy for 250-yard shots, and some experimenting with handloads put all of them in the inch or less class at 100 yards. True, I didn't fire any that gave consistent group printings of half-inch or less, but I don't expect that from a factory rifle nor is it needed to be successful in the field.

To build a custom rifle is neither easy nor an inexpensive venture. If the rifle is going to reflect the best in material and workmanship, it has to cost money. Another important aspect is getting a qualified person to do the work. Screwing in a heavy barrel in a military action and glass bedding it in a stock does not constitute a custom-made rifle. Even when this much is done, it's still a long road before the rifle is ready for field action.

A number of private gunsmiths do high quality work and now Remington offers its 700 Model in a customized version. The price tag for this specialized work is relatively high, but, in all fairness, the end product could be what a dedicated varmint shooter has dreamed about for years. I've shot many custom jobs with excellent results, but the rifle alone will not guarantee success. I found out the embarrassing way there's a good bit more to varmint shooting than just having a specially built rifle.

To emphasize this point a little

more, I know a photographer who leaves no dollar unturned to come up with the latest and most sophisticated equipment. Yet he gets very upset with a pal of his who also gets top results with a 15-year-old camera that lacks many of the modern improvements. This indicates that the person involved is still mighty important, and to my way of thinking, hunting is still a combination of hunter and rifle.

Once a young man approached me with a set of drawings for a custom 22-250. According to the prices he'd obtained, the rifle without a scope would have cost just under $400, which makes it a $500 outfit when a scope is added. He seemed surprised when I told him it was possible to have a high quality varmint outfit for less than $350, including a good scope. He hastily explained accuracy was what he was after, and that only came in the custom rifle. Good fortune doesn't come my way too often, but earlier that day I had test fired a Ruger No. 1, a Remington 700 and a Mossberg 800CVT, all in the 22-250 chambering and all heavy barrels. When he looked at the targets, he said it was nice shooting for 50 yards, and I finally had to fire a group with one of the rifles to prove my shooting had been done at 100 yards.

This young man had been misled into thinking only custom rifles carry any significant degree of accuracy. Sometimes I feel too much ado has been made over customizing or specializing the rifle. I don't say that sleeved actions, ultra-precise chambering and special bedding techniques won't enhance a rifle's performance, but I'm not convinced they will contribute any substantial gain in the hunting realm. I've shot some very fine outfits in the field, but I have a friend with a vintage Remington M-722 222 hunting rifle that matches most of them shot for shot, either in the field or at the bench. It's a fantastic little gun.

If a custom outfit has been a persistent dream, take my advice and get started. However, be aware of the pitfalls and the extra cost involved. Know in advance what is wanted and the approximate cost, and above all else, don't expect the new outfit to fire ⅜-inch groups right from the start. Maybe I'm a little over cautious, but I like to smooth out a fresh, green barrel with no less than 75 rounds of low velocity loads. Also, I'm dedicated to the philosophy that cleaning the accurate barrel is a must. I have one outfit that gets cleaned with a good brass brush scrubbing every 20 shots while the barrel is still warm.

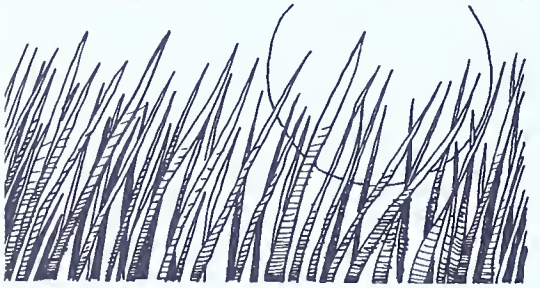
Maybe the whole thing is a matter of individual preference, but whatever the decision, get started on it early and stop agonizing over which varminting outfit is best.

GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9x12 inches on 11x14 heavy, coated paper, without the GAME NEWS logo. The set includes Ned's woodcock from the April 1974 issue; the woodchuck from July 1974; the doves from September 1972, and the buck and doe from the December 1971 issue. These prints are not available individually. The price is $3 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.

In the wind

chuck fergus information writer



Forty musk oxen have been captured on Nunivak Island, west of the Alaska mainland, and airlifted by Soviet air transports to Siberia. The restoration project is part of the U.S.-U.S.S.R. Environmental Protection Agreement of 1972. Musk oxen were extirpated years ago from both countries. The animals were reestablished in the U.S. in the 1930s and have since overpopulated their range on Nunivak.

—Wildlife Management Institute

Some scientists feel a new approach must be adopted in utilizing the world's wildlife resources if the growing needs of a burgeoning human population are to be met. Alarmed by gross depletion of fish, marine mammals and other wildlife resources, 30 leading scientists have called for replacement of the "maximum sustainable yield" concept with an approach which considers entire ecosystems rather than a single species at a time. —World Wildlife

The Environmental Protection Agency has denied a request by the state of Louisiana to use DDT for tobacco budworm control on cotton. A similar request was granted last year to use DDT for tussock moth control in the Pacific Northwest.

—Wildlife Management Institute

The U. S. District Court of Wyoming has, in effect, told the Bureau of Land Management that ranchers holding grazing permits can spray public land if they desire. A large Wyoming ranch sprayed 3600 acres of public rangeland with 2,4-D—reportedly by mistake—to kill sagebrush and stimulate grass growth for cattle. The Interior Board of Land Appeals then penalized the ranch by denying grazing privileges on certain public lands for two years. The ranch appealed to the District Court, which reversed the order.

—Wyoming Wildlife

The Boone and Crockett Club has announced a major change in trophy entry procedure for the North American Big Game Awards Program. Effective January 1, 1975, grizzly bear trophies from south of the United States-Canada border are not acceptable as entries. After reviewing the grizzly's status, the club has concluded that while populations north of the border are generally in good shape, the same cannot be said for the lower 48 states' population.

—Boone and Crockett Club

In 1972, Oregon became the first state to enforce minimum deposits on beverage containers. The law places a five-cent deposit on nonstandard beer and soft drink containers, and a two-cent deposit on standard soft drink and beer containers. The measure also banned sale of cans with pull-tab tops. The Oregon Bottle Bill has been an overwhelming success after 2½ years. Based on surveys by the Oregon Highway Dept., there has been a 90% drop in the number of beverage containers littered per mile between corresponding months before and after the bill went into effect.

—North Woods Call

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COVER PAINTING BY AL GILBERT

The wild turkey is Pennsylvania's largest game bird, and many sportsmen claim its senses are the sharpest. There's an old Indian saying: when a deer sees a man, it thinks "maybe man, maybe stump," and keeps on feeding. When a turkey sees a man, it thinks "maybe man, maybe stump," and Putt-putt! It's long gone. Turkeys can get 'long gone' in quick fashion; when frightened, they flee at over 20 mph on foot and can attain more than twice that speed in the air. *Maleagris gallopavo* is truly an impressive fowl, and come next autumn many Keystone State hunters will take to the woods to try and bag the big bronze bird.

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EDITORIAL . . .

Hunters Increasing, Wildlife Benefits

DESPITE THE CONSTANT CATERWAULING of the anti-hunters, inflation, unemployment and other problems, a record 16.4 million Americans spent $143 million dollars on state hunting licenses last year, according to figures released by the U.S. Fish and Wildlife Service. This is an increase of almost one million hunters and $19 million over the previous year. The revenues derived from these license sales form the bulk of the monies used by the states to carry on their wildlife management and conservation programs.

Pennsylvania led all states last year in total license sales with some 1.7 million. Also topping the million mark were California, Michigan, New York, Texas and Virginia. Montana sold the most permits to out-of-state hunters, followed closely by Pennsylvania, South Dakota and Colorado.

These figures are impressive enough in themselves, and even more so when considered against the flood of propaganda put out nowadays by Anti-Amory and others of that ilk who have found a way to make a living out of lying. Perhaps even more interesting are some big numbers representing sportsmen-derived money, the well-known Pittman-Robertson funds. Lynn Greenwalt, director of the Fish and Wildlife Service, has just announced that over $43 million—the first of two installments which will total perhaps twice that amount—is being distributed to individual states to aid in sport fish and wildlife restoration and hunter safety programs. This money comes from excise taxes collected in fiscal year 1975, which ended June 30. It will be used by the states to help finance their fish and wildlife programs during the first half of fiscal year 1976. The second installment will be distributed in December.

Pittman-Robertson funds for fish restoration programs come from a 10 percent excise tax on fishing rods, reels, etc.; those for wildlife restoration and hunter safety programs come from an 11 percent excise tax on sporting arms and ammunition and a 10 percent excise tax on handguns. Years ago, when various excise taxes were being eliminated, sportsmen asked that these be continued in order that wildlife programs would not suffer. Since 1938, over $700 million has been collected and used for wildlife. How much have the anti-hunters given for wildlife?

Fifty percent of the funds collected have gone into improving habitat for game (which also improves living conditions for non-game species), 25 percent has supported research in the wildlife field, 20 percent has been used to buy or lease land (in all, more than 84,000 square miles, an area larger than the six New England states, Maryland and Hawaii combined), and only 5 percent has gone into administrative overhead. These funds are distributed according to a formula based on hunting license holders, land area, and population. Texas, Alaska, California, Pennsylvania, and Michigan are the largest recipients with at least $1.1 million going to each.

Again we point out that this money has come directly from sportsmen; and again we ask, what have the anti-hunters given for wildlife?—*Bob Bell*

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—DOUG PIFER

Wind Over the Oats Stubble

By Rev. George Harting

AMONG THE Pennsylvania Dutch farm folk there are many colloquialisms that bear significantly upon their reverently simple and frugal way of life. One among the many is the statement, "Wind over the oats stubble." It is a figurative way to say that the time for planting has ended.

This saying is not only accurate, but it also possesses sentimental quality. Sowing oats is among the earliest chores to which the grower directs his attention. Though the chill March winds still prevail, implements, seed and fertilizer are readied for the first thaw, and by the end of that month the crop will be germinating. Oats is the product of a single season and, in our state, it used to be the last of the major grain crops to be harvested.

Wind over the oats stubble is a reality about mid-August; the harvest at that time not only hints of cooler nights and shorter days, but projects the sobering thought that granaries should now be filled; the success of the later corn crop can already be determined, and for all practical purposes the sowing and growing seasons have ended; there remain now no second chances.

Many signs alert one to the unmistakable law of times and seasons: scrub trees in swamp and fencerow, bearing the tangled burden of poison ivy, show a tint of red now, and the black walnut shows a bit of paleness about its foliage. In woodlots the May apple dries and drops. The lazy wave at noon of the wild carrot in the pasture acres quickly churns like troubled white water as a late season thunderstorm gets in its licks. The backyard, too, bears the signs of the times; pesky fall-grass, which until now seemed dormant, begins its late but relentless surge, choking out the choicer varieties as it makes its bid to dominate the green.

Wind over the oats stubble suggests both fact and feeling. Neighbors meet now in the shade of a black cherry which for generations marked the property lines. The plow can rest in the furrow awhile. It's time for a respite from the heat of the mid-August sun; it's time now for householders to fraternize, to assess with a friend the year's prosperity from the field.

This is more than a review of dates and seasons on the fiscal calendar; it reflects an emotional appraisal as to whether the returns from the field were worth the efforts.

The sentiments of the outdoorsman may coincide precisely with that of the grower. By this time the productivity of our wildlife is determined. For all practical purposes the breeding seasons are over; the toll that predation, civilization, and weather have had on the new crop of game can be determined. Appropriately in mid-August the sportsman can borrow from agriculture its truism, and meaningfully phrase it—wind over the oats stubble.

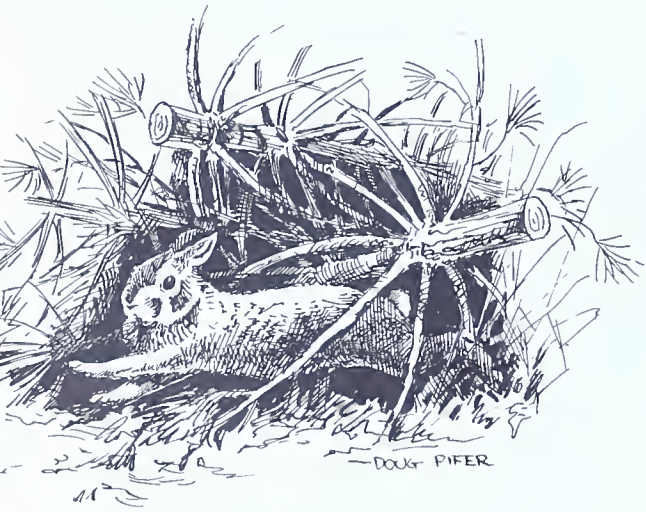
February has been designated as the silent month. Absent is the chatter of the songbird, the scolding of the jay, and the crow of the pheasant cock. In the deep woods the bark of the great horned owl may interrupt the stillness during full moon, and as dawn breaks the frigid air may bear the noisy challenge of a band of crows evicting the night prowler from their rookery. Apart from this, the hills are quite still. The animal species that hibernate are totally out of sight, deep snow has yarded the whitetail, and the bronze gobbler quietly works

the spring seeps for sustenance. Even human activity grinds to a minimum; February is the time for a friendly fire and dreaming. Forgotten by too many of us is the wildlife that finds every winter day a challenge and every blizzard a threat; starvation rations are the rule. Yet in spite of our indifference, it is taken for granted, come fall, the anticipated bounty of wildlife will again be available.

Fortunately, however, mother nature may be counted upon to perform her magnanimous role in assuring posterity. She operates in more ways than man can imagine: the biological laws that govern ovulation, the constant struggle of survival of the fittest, the recurring accuracy of seedtime and harvest, the inborn capacity and desire of a mother to care for her first litter, and the unexplainable force that draws migratory species from the frozen north to the winter feeding grounds and returns them for nesting. These are but a few of the many mysterious ways by which the world we call nature puts her best foot forward.

If, indeed, during February wildlife is designated silent, it surely cannot be categorized as inactive. Man must not mistake his own feelings to be synonymous with those of the wild kingdom, for while in obvious comfort the world of humans enjoys firesides and electric blankets, and before high sun and longer days make the out-of-doors invitingly comfortable again for man, the relentless cycle of nature's reproductive processes are already in gear.

A RABBIT SPRINGING from a brushpile offers the hunter a tricky shot; contemplation of nature provides the outdoorsman with a different kind of challenge.



February 16 was a sunny day, but a cold breeze moved. Suddenly, what appeared as indefinable confusion became the distant murmuration of the returning grackle. Forming a numberless cloud, these rugged individuals cleared the pine woods to settle into the swampy oak bottom for forage. There would be tough times ahead for them. Christmas bird counts had listed their pilgrimage by the hundreds of thousands to the Carolinas, Kentucky, Tennessee, Georgia and Florida, but their early return guaranteed the coming of spring and the preservation of the species. By the lag end of February, the fraternizing of cooing doves projects a logical sequel—shabby twig nests holding chalk-white eggs in the pine crotches where the hatching female devotes her efforts to the task for which she was born. Then, also, the pheasant cock that escaped the gun, though seldom seen earlier, begins to strut more boldly as he stakes out the geography for his harem's territory.

While many among us are nursing arthritic joints and envy the natives of tropical climates, the whitetail doe is desperately occupied, not only with keeping her own body stoked, but also nourishing as well her twins. She has, as the Pennsylvania herds will indicate, done a consistent job of it. Despite some harassment by stray dogs, she promises to bear her young in early summer to give them ample time to mature sufficiently to face a future winter. Busy highways in February and March write a saga of death, yet beyond this carnage is a message of survival.

The sportsman should have it so good! Nature, so generous in her efforts, has left so little to man. Never-

theless, in all too many instances, man takes the posture of an obstacle rather than one of an assistant to the natural law. In spite of this, however, the relentless struggle for survival is not abandoned. The well-known phrase, "blood, sweat and tears," if it may be borrowed, depicts the efforts that brought the farmer to a successful harvest. And fortunately so, for in mid-August it's too late for "hindsight." Similarly, one might ask, what are the disciplines for the outdoorsman that will designate him the ally, not the enemy, of nature? By what creed must he approach the threshold of another open season? How maintain a tranquil conscience? The query must have answers.

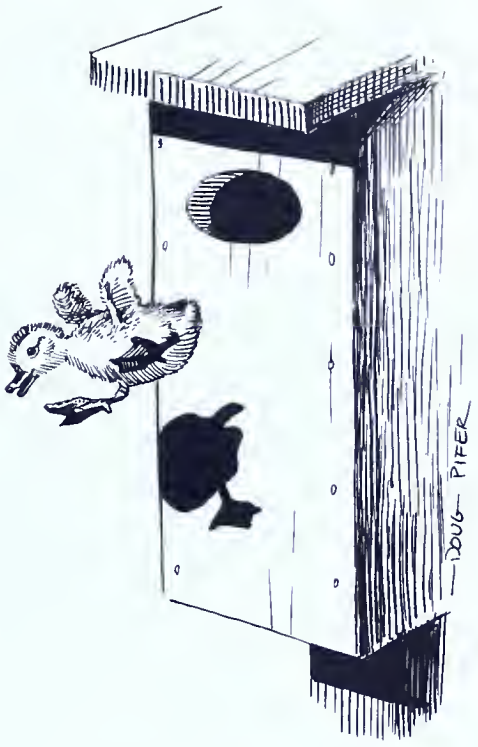
What should be expected of the avid sportsman?

1. Dedicated Physical Effort

A young hunter had taken his prize field gun to a gunsmith for cleaning and overhaul. Upon completion, the craftsman wrote the youth a flattering letter: "Your gun is on the rack, cleaned and repaired . . . according to the weeds, seeds, etc., in its mechanism, I conclude you are not a path hunter . . . I believe you hunt in the rain occasionally, as there was evidence of rust internally." How we enjoy being designated as "pace setters" in our pursuits afield!

Is it too much to assume that the avid outdoorsman who enjoys the privilege of taking game will exert an equal effort to put it back and be an enabler in reproduction? Why should the routine boredom of TV not be replaced on those cold blizzard nights by trying one's hand at a few wood duck boxes; they can be set up on an early visit to the lake. Success in housing a family of woodies and watching their activity would add a new dimension of interest to later trips.

Occasionally food for deer might be scarce in the deep woods. What is there to prevent one from committing "equal time" under supervision at



WOOD DUCK CHICKS vaulting from the nest illustrate nature's inborn drive to survive. Nesting boxes can be set up by sportsmen committed to wildlife.

browse cutting?

As another example of things that can be done, I remember a diversion gutter which had eroded to such proportions that a horse could conceal himself in it. A bit of imagination and dedicated interest transformed the eyesore into a conservation area. Hundreds of surplus Yule trees destined for burning were used to slow the erosion. They provided, at the same time, a refuge for cottontails.

At season opening, hunters who are regularly engaged in inactive professions are cautioned not to try for the top of the mountain in a single leap. Why not keep in shape as one pays back his debt to nature with dedicated physical effort?

2. The Support of Progressive Legislation

What role can one play at the club meeting? Must it be confined to eating limburger cheese sandwiches and the shared mumbling of complaints

against the lawmakers? Suppose a law is poorly written, or for that matter, even is a threat to conservation. That regulation can be challenged—but let it be done intelligently. Gather and present facts. The voice of the hunter will be heard, providing it sounds a clear and intelligent idea.

It is hoped that the sportsman will support those policies which, even though they might blight his personal interests, will support a larger goal.

3. Vindicating the Sportsman's Image

Not long ago this stern headline greeted field-sports readers: "Outlaw Hunting? It Could Happen." Details followed indicating that a mounting barrage of criticism was being leveled against hunters and "Unless wildlife managers and their conservationist allies mount a program of public education," there's indeed a chance that hunting could be outlawed. Most of us have felt the influence of such pressure groups.

The August, 1971, issue of GAME NEWS carried a "letter to the editor" by Alice Herrington, who at that time (and perhaps still) served as president of Friends of Animals, Inc. After a scathing condemnation of hunters, Mrs. Herrington concluded: "Let's tell it like it is: Hunters are not only paranoid—they are miserable cowards."

A socio-religious group, whose name is withheld for propriety's sake, published not too long ago a pamphlet that projected honor rolls for two specific groups. The first was to include sporting goods dealers who eliminated guns and ammunition from their stores and said they would not sell them in the future. The second was for those citizens who would get rid of their own guns, support a day set aside for communities to surrender guns, and further—I quote the article exactly—"insist that Congress pass much stricter gun control laws, totally outlawing possession by private citizens except under very carefully defined conditions."

It should not be imagined that such radical propaganda does not rub off. In private conversations recently, it was evident that a clergyman reputed to be quite intelligent found it beyond the realm of imagination that hunting could have a spiritual dimension; and, in similar debate, a conscientious objector was severely castigated because he could find it in his heart to be an enthusiastic archer. Much work needs to be done to vindicate the image of the sportsman.

It should go without saying that a concern for good relations between landowners and hunters must also have high priority on the organized sportsmen's agenda. How many acres could remain "open" and what good relations could be engendered by the committed strength of organized sportsmen!

4. A Mind Set to Pay Our Way

A few among us have been privileged to hunt a favorite mountain ridge for three decades. After this length of time, and with the same corps of buddies in camp, one will know who tells the stories, who brings the pepperoni, and what kind of refreshments will be available. Oh, yes, one can be sure, also, that Joe will have at least one new deer rifle to show off after supper; he's never satisfied with last year's model.

We should seriously ask ourselves what really are the essentials for which we are willing to pay as we go afield. Is a new firearm of higher priority than habitat suitable for game? Are countless accessories more important than land on which to hunt, law enforcement, or scientific game management?

In a day when hunting on private land is basically by invitation only, dare it be imagined that the privilege of pursuing game can, or even should be, had for a pittance?

Only the sportsman who has given due concern to these and equally worthy efforts can anticipate with optimism the late summer wind over the oats stubble.

INTERVIEW: THREE DGP'S

By Chuck Fergus
PGC Staff Writer



Furry



Bower

Schweitzer



WHEN MOST Pennsylvanians think of the Game Commission, they automatically picture "the warden," a man in uniform driving a green Matador, Scout or Cherokee with a deer head decal on each front door. While these law enforcement officers—we call them district game protectors—represent only one branch of the PGC, they're by far the most visible to the public.

The Commission divides the state into 136 districts, each with a district game protector (DGP). A county has one, two or three districts. Additionally, 27 land managers can enforce game laws in the field.

Game protectors' duties range from dispensing information on seasons and bag limits to testifying in court to babysitting orphaned animals to arresting jacklighters. Often their hours are long, but their work is rarely boring.

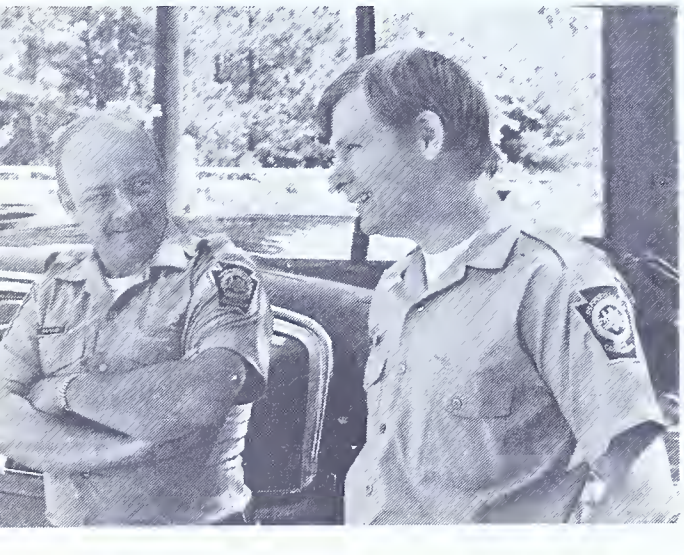
In this interview, I will talk with Bill Bower, Bradford County DGP;

Dick Furry, former Huntingdon County DGP and now Assistant Supervisor at the Game Commission's training school in Brockway; and Jack Schweitzer, Dauphin County DGP. Together, these three men have over 29 years of service with the Game Commission.

Bill Bower lives in Troy, a small town about 15 miles south of the New York border in northeastern Pennsylvania. His district includes the western third of Bradford County; Canton, with around 2200 inhabitants, is the district's largest town. Last year, hunters harvested over 4500 deer in Bradford County, and good turkey, squirrel and woodchuck populations exist in the area's wooded hills and mountains and open farmland. Bower's hometown is Harrisburg, and he's been with the Game Commission for seven years. A softspoken man with a broad, cheerful smile, the 36-year-old Bower enjoys rural Bradford County.

For 18 years, Dick Furry had his headquarters in Huntingdon County (southcentral Pennsylvania). When he moved last year to the training school, he kept his family's house in his old district—he still considers Huntingdon County home. Both upland and big game abound in the county's rolling hills, wooded ridges, deep-timbered mountains and fertile valleys. Originally from Martinsburg in Blair County, Furry is slow-speaking and calm, a lover of nature who also relates well to people. At 47, he's a top-flight law enforcement officer: in 1974 Dick received an award from Shikar-Safari Club as Wildlife Officer of the Year and also won the Pennsylvania Wildlife Law Enforcement Award, presented by the Conservation Law Enforcement Chiefs Association at the Northeast Fish and Wildlife Conference.

DGP SCHWEITZER, right, talks with Gary Packard, game protector in the northern part of Dauphin County. Their districts border each other.



Jack Schweitzer, 25, is a graduate of the Game Commission's 1973 Game Protectors' Class. He hails from West Mifflin, just outside Pittsburgh, and is district game protector in another urbanized area—southern Dauphin County, which includes the Harrisburg metropolitan area. Usually exuberant, at times intense and serious, Schweitzer has an ability to deal with the often-complex wildlife problems that arise in city and suburb.

For this interview I wanted a cross-section of game protectors and therefore chose field men of differing backgrounds, districts and ages. I wondered how their responses to certain questions would vary. Judge for yourself. Here are District Game Protectors Bower, Furry and Schweitzer:

What made you decide to become a game protector?

Bower: My brother Wes was Luzerne County game protector several years ago, and I became interested in working for the Game Commission through him. [Wes is now a Conservation Information Assistant in the PGC's Southcentral Division Office—*C.F.*] I started as a deputy, worked under DGP Barney Thrush in Dauphin County for a couple years, and then I was accepted for the Game Commission's training school.

Furry: I was influenced by two other game protectors—Roland Turley and Bill (William F.) Shaffer—who I knew

and respected as conservation officers. Also, I was interested in conservation and nature from the time I was in high school.

Schweitzer: While I was growing up, I watched my hometown—West Mifflin, near Pittsburgh—become an urban area. This bothered me. I wanted to help make people aware of how wildlife and nature are harmed by expanding cities and towns, which continually reduce habitat. Also, I have a strong family heritage of hunting, and when I saw the sport threatened by the anti-hunting movement I wanted to do something.

What do you enjoy most about your job?

Bower: Being outdoors much of the time, working with wildlife, giving programs for children in the local schools, and enforcing the game laws. My law enforcement duties are probably the most enjoyable part of my job.

Furry: I especially enjoy getting to know wildlife and nature better, doing my job in freedom and without regimentation, and meeting and associating with many fine people.

Schweitzer: I like the diverse duties—everything from speaking before a class of children to arresting a willful violator.

What percent of a game protector's job is boring, dull, routine—what percent exciting?

Bower: None of it is routine, because of the variety of work. For example, this month I found an abandoned yearling bear on State Game Lands 12 near Cabin Run. I brought it home, and later it was taken to Penn State. Yesterday I took a raccoon to Summerdale for testing for possible rabies. The other day I checked a bear damage complaint. You can see why I'm never bored with my job.

What was the most satisfying moment in your Game Commission career?

Bower: When I arrested a local man who considered himself quite an authority on the game law. For close to three years, this fellow assisted violators by appearing at their hearings and trying to get them released on technicalities. Finally, I arrested this man for having a loaded gun in a vehicle and won a hearing on the case. He hasn't bothered me since.



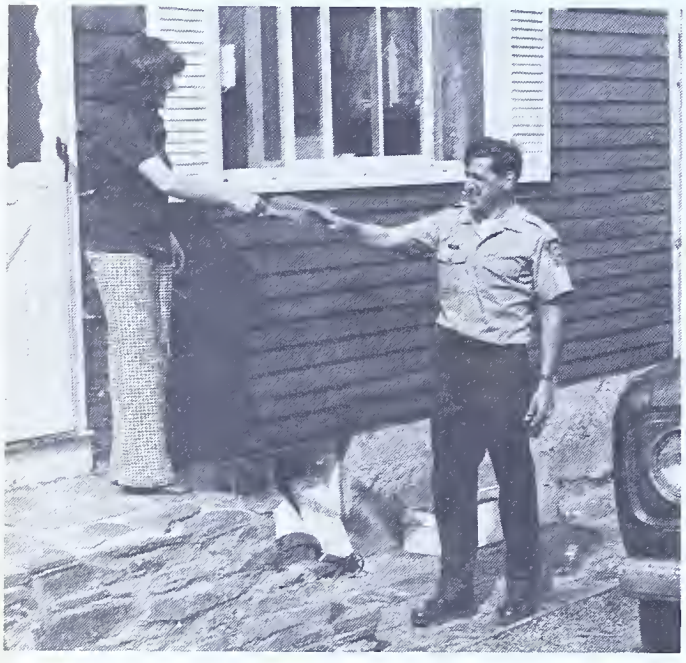
Photo by Hartford Courant

JERRY KIRKPATRICK, LEFT, Game Commission's Assistant Chief of Law Enforcement, presents Dick Furry with the Pennsylvania Wildlife Law Enforcement Award.

Furry: My most satisfying moment came when I graduated from the Game Commission's training school. Also, I get much satisfaction from working with young people and finding that they're deeply interested in conservation.

Schweitzer: I have had two very satisfying moments. One came after I spoke formally before a group of people on why we need hunting and wildlife management. When I finished, I realized that I had made myself understood and had truly communicated with my audience, many of whom were not hunters. A second and equally satisfying moment came when my deputies and I broke up a jacklighting operation. We were on a stakeout, and I watched the whole violation from start to finish—the actual shooting of a deer, the men

dragging it from the field and then butchering it. This was a picture-perfect law enforcement case, where things just fell into place after a lot of hard work.



MARY ALICE BOWER relays a message to husband Bill. A former Harrisburg-area resident, Mrs. Bower now enjoys the small-town atmosphere of Troy, Bradford County.

What's the worst violation you've investigated?

Bower: A hunting accident that wasn't really a hunting accident. Two juveniles shot it out after an argument; one ended up in the hospital with a shotgun wound of the hand and arm, and the other was superficially wounded in the chest. They claimed their injuries had resulted from a hunting accident. I prosecuted both of them. Their hunting licenses were revoked, and the State Police later pressed criminal charges on the incident.

Furry: Some people in my district were killing deer and selling them to subsidize drug and alcohol habits. I arrested a total of about 15 people in a series of violations of this nature, all within a two-year period.

Schweitzer: One violation stands out as being especially frustrating. Somebody killed four deer out of season and left their entrails in the middle of the road. They placed a shiny, unfired 22 cartridge in front of each pile, obviously intended to infuriate me. It was a spite killing, and although I had a hunch as to who had done this, I couldn't prove anything.

Have you ever felt your life was threatened in the line of duty?

Bower: No, although I've received a number of verbal death threats, things like, "You've got a week to live," or "Your wife is going to find your body on the porch some morning." I've never taken these threats seriously, though.

Furry: I felt my life was in danger twice. The first occurred when I was helping another officer search a house. A fight started, and the wife of the suspect swung a rifle toward us. When I drew my revolver, she lowered her gun. Another time, a man with a shotgun had the drop on a waterways patrolman and myself in Huntingdon County. Fortunately, we persuaded him to put the gun away.

Schweitzer: I've never felt I was in danger of losing my life, although two of my deputies were recently held at gunpoint for close to an hour by some men they'd attempted to arrest for poaching pheasants. It was an ugly situation which fortunately turned out all right.

What's the most common violation in your district?

Bower: A loaded gun in a car or truck. This is a very unsafe practice.

Furry: Illegally killing deer, both at night and out of season. Also, a minor violation which I often prosecuted was carrying a loaded firearm in a vehicle.

Schweitzer: Hunting in a safety zone. I consider this a serious violation, because it's dangerous and it gives hunters a bad image.

Has a violator ever tried to bribe you to avoid arrest?

Bower: Yes. My first year as a DGP, I arrested a man from Philadelphia for shooting within 25 yards of the road. He said, "Here, take this $15 and forget the whole thing." I said, "I'm going to pretend I didn't hear that, and if you say it again you're in real trouble."

Furry: No one ever tried to bribe me.
Schweitzer: No bribes—just threats like "I'll have your job."

What separates the illegal road hunter and the hunter who sights game from a vehicle, alights and makes a legally acceptable kill?
Schweitzer: If a person sights a game bird or animal, pulls his vehicle off the road at a safe point and walks 25 yards off the highway before taking a shot, he meets the criteria of the law. But while this is legal, it's not necessarily ethical. A vehicle should be used to travel to and from areas where a person intends to hunt, rather than as an integral part of the hunt. I hope we stick to the traditional values of hunting in this matter.

Do habitual violators often operate in predictable patterns?
Furry: Each individual has his own characteristic M. O., but no set patterns can be established for all violators. Sometimes you can tell who committed a violation by how they did it—maybe they used two vehicles in jacklighting (one for shooting, one for watching or picking up the animal), or butchered a deer in a characteristic manner. Also, some violators tend to operate in the same general area or along the same roads.

Can you arrest a hunter for trespassing on private property?
Schweitzer: No. A landowner must contact a magistrate or the police and file charges himself.

If a hunter witnesses a game law violation, what should he or she do?
Schweitzer: Report it to the local game protector. But first, he should



EVEN AN URBANIZED district has some beautiful and peaceful spots. Here, DGP Schweitzer enjoys a few moments of contemplation along the water's edge.

note the description and license number of any vehicle involved, the suspect's hunting license number, time of day, location of the violation, description of the suspect and other relevant facts. This gives a game protector some solid clues to work with.

Have you found that any particular age group is especially prone to committing violations?
Bower: No. Violations seem pretty well spread out through all age groups.

Can you recall any humorous incidents you've run into while enforcing the Game Law?
Furry: Once, on a deer search, a suspect—who was pretty fat—tried to escape through a window. He was too big for the opening and got hung up on the window frame. He wasn't too happy about the situation, but the arresting officers were amused. Another time, we were on a jacklighting complaint. The suspects were using a pickup truck to look for deer over a large area. My deputy (unknown to the suspects) hopped into the bed of the truck and rode along with them as they were spotlighting. The suspects didn't know they had an uninvited passenger until I stopped them at the main road.

Should a game protector ignore or overlook "minor" violations for the sake of "public relations" or befriending hunters?

Schweitzer: If I find a clear, definite violation has been committed, I prosecute it. Ignoring a violation, however trivial it may seem, can lead to a permissive attitude on the part of both the violator and the hunting public in general.

Bower: I don't *overlook* any violation, but occasionally I give warnings to juveniles on some charges. I think a lot of kids respond better to warnings than to stiff fines and can learn their lessons in this manner.

How many fatal hunting accidents have you investigated in your district?

Bower: None in six years, I'm happy to say. That's fortunate, considering how many people hunt deer and woodchucks in Bradford County. Many fatal accidents are associated with big game and chuck hunting.

Furry: Two in my district, although I've assisted other game protectors in neighboring districts when they had to investigate fatals.

Schweitzer: None in 2½ years. There have been 11 non-fatal accidents; the most serious was a 14-year-old boy who lost an eye.

Dick, what's the hunting like now, compared to when you first became a DGP?

Furry: The amount of game in my district is equal to what it was 18 years ago when I started my career in Huntingdon County, with the exception of bear and waterfowl, which have increased. There are more hunters afield today, but I'd say that hunting is still excellent.

In your opinion, what percent of Pennsylvania hunters are sportsmen? What percent are slobs?

Bower: A vast majority of our hunters are sportsmen—a few, maybe three or four percent, are slobs.

Furry: Maybe 95 percent are sportsmen, and only five percent are what I would call slobs. These same individuals also seem to be constantly in trouble with the police, the Fish Commission, etc. Maybe half the legitimate sportsmen, however, commit occasional unintentional acts which reflect poorly on hunting.

Schweitzer: Seventy percent are sportsmen. The other 30 percent vary from being occasional, impulsive violators to habitual violators. Perhaps 10 percent are what I would call out-and-out slobs.

What do you see as the long-range future of hunting?

Bower: There will probably be restrictions resulting from more and more hunters with less land to hunt on. In my district, which is quite rural, there is little anti-hunting sentiment. While I realize the strength of the anti's throughout the rest of the state and in urban areas across the country, I think that the anti-hunting movement will lose ground in the future. "Concerned" people now violently opposed to hunting will probably jump onto another bandwagon when they tire of this cause.

Furry: Hunting can and will be jeopardized by indiscriminate land use and the accompanying loss of wildlife habitat. This worries me more than the threat posed by anti-hunters. Also, the unethical practices of some hunters reflect badly on the majority, making hunting objectionable to many non-hunters.

Schweitzer: I look for increased restrictions and controls; more hunting will have to take place on public lands, primarily due to posting of private holdings as a result of unsportsmanlike actions by some hunters. Also, we'll continue to lose wildlife habitat. I foresee my district going from a fair hunting area to an area of extremely limited hunting opportunities—especially for farm-associated game species—if unwise land development continues, and there's no reason to think that it won't.

Whitetail Hunting Tips

By Nick Sisley

THE SNOW crunched underfoot, indicating extra cold temperatures for the opening of deer season. I was on the way to my predetermined stand.

There was no wind, the stars were bright and clear, and the new one-inch layer of snow created enough light to make walking to my spot relatively easy. I had given myself plenty of time. I knew well from previous deer hunting forays that a fast walk in heavy clothing soon has one sweating, even on a cold morning. Once on stand, the feet, back, and head are damp and cold. The hunter can't sit still, and he is soon up moving about. After time-consuming preseason planning to choose the proper area and the proper place to sit and wait, I want to stay put for hours.

The most knowledgeable whitetail hunters spend considerable time afield prior to opening day—in search of rabbits, squirrel, partridge, quail, pheasants, or turkey—almost any challenging game that provides an excuse to get outdoors. Prior to buck season, I do some grouse hunting, and grouse and deer habitat go hand in hand. Where you find one, you find the other. So while I'm hunting ruffed grouse, I'm actually doing my preseason deer scouting.

On my bird hunts I see plenty of whitetails. Most of them are antlerless, but when I either see a buck of trophy proportions or several antlered deer, that's when I start looking intently for whitetail calling cards. These animals are predictable creatures of habit, traveling over the same country day in and day out. First I look for a well-worn deer trail. Once I find the trail, I'll spend an hour or more walking it, looking for even more attractive sign.



SURE ENOUGH, AN 8-POINT materialized. He knew he was the king of this band, and he showed it. The hunter waited until the deer was 30 yards away.

I'm looking for spots where antlered deer have had their battles with surrounding trees, where they've rubbed their itchy velvet on saplings, or where they have just been feeling their oats and doing imaginary battle on a bush with an adversary buck. Find such spots and you'll probably have a concentration of bucks nearby.

An even more important sign to look for is a "buck scrape." During the height of the rut a buck tries to lure a mate in by scent. The buck finds a likely-looking spot along a heavily-used trail or possibly at the convergence of several deer paths.


A ROSATO

Here he'll paw a patch of ground two to four feet square and urinate on it. All during the rut he seeks out each "buck scrape" he's made and then "freshens" it up. The amorous doe sniffs out these scrapes and picks up the buck's trail. Each buck will have several pawed-up scrapes that he visits daily; they are his calling cards to try and lure every doe in the vicinity.

During the height of the deer rut my bird dog and I are in pursuit of partridge. We see the deer. We see those with antlers. We find the heavily used paths, the buck rubs, and the deer scrapes. This is preseason planning, and if you don't participate in it prior to the season, your chances of scoring on whitetails are vastly reduced.

Another whitetail pointer worth your consideration is this—*don't* concentrate on areas that were famous deer producers 20 or even 10 years ago. Whitetails are normally not creatures of the mature or pole stage forest. They thrive in areas where the woods have been clearcut and are starting to regenerate—brush! Keep your eye out for areas that were cut over a few years ago and are now growing into prime habitat. Keep areas that are being cut currently in mind for future whitetail seasons.

On that opening day, I finally reached my pre-chosen whitetail stand, pulled my small piece of sheepskin from the game pocket of my wool coat, spread it on my log wool side up, and sat down. (Sheepskin is an excellent whitetail hunting seat for cold weather stands. It's light to carry, sitting on the wool side provides great comfort, and the tanned side is nearly impervious to moisture.)

My stand was near the convergence of two deer trails which had a massive buck scrape right in the center. The surrounding brush had been battled and scarred, and several saplings had their bark scraped away by one or more active bucks. I chose the east side of this spot, because the area normally has a prevailing west wind.

I had approached my stand slowly, and as I sat down, even though the temperature hovered around 18°, I was warm. I wore heavy woolen pants and coat, layered undergarments beneath that, a warm hat, light leather gloves, and insulated leather boots. It was still 25 minutes before shooting time.

During one previous year I had learned the value of getting on stand ahead of time. That year I had done my preseason scouting well and was more confident than ever that I had *the* superb spot picked out. But I overslept a little on the first day and had a rush drive to my hunting area. My car had been sitting outside all night, and it was plenty cold. When I got to my area—a popular one—I was still the first one there. I pulled out my rifle and cartridges and closed the door. When I inserted the key in the door lock, I couldn't turn it. It was frozen solid. While I fooled around trying to lock it, another car pulled up, a hunter got out, and he got to my post before I did.

Stand Proved Ideal

The stand was a clump of trees in the middle of a small brushy field. Numerous deer trails ran into the winter wheat and clover which the deer had been feeding on. At 8 o'clock the fellow who beat me to my stand missed a 6-point buck, and at 9 o'clock he missed a forkhorn! That's why I have been certain to be on stand far ahead of shooting time ever since.

The eerie twilight slowly was transformed into less and less darkness. I kept checking my sights. It became easier and easier to see any target I picked out. By shooting time it was just right. I looked around in a complete circle, and was thankful that I didn't see another hunter. It's tough to pick a stand in prime whitetail country and not have someone else close by. With so many hunters, fluorescent orange has untold safety

merit. Other colors fall far behind in visibility. Several companies make fluorescent orange insulated coats. They are an excellent choice.

So—I was parked on my stand. You've heard how much time I'd spent with preseason planning, choosing the major area, finding the deer paths, the buck rubs, the deer scrapes, the bucks themselves, even the very log that I was sitting on. It didn't all come about by accident, even though many whitetails fall prey to lucky hunters who have done absolutely nothing to improve their chances. But if you want to become an accomplished deer hunter, take heed.

Man Passed By

A half hour after shooting time I heard a crunching noise in the snow. I know from the cadence it was a man and not a deer, and thanked my lucky stars that I had more patience than this tyro. I watched him pass. He was making a lot of noise and walking aimlessly. If there had been a deer between where he started his trek and my position, he could well have pushed it right down the trail to me.

In areas where there are so many whitetail hunters, it is most important to spend at least the first three to four hours of opening day sitting at a prechosen top spot. When the weather is particularly cold, the tyro can't sit because of improper clothing and impatience. These men and those that are late getting to their stands are the individuals that push whitetails to hunters who have chosen their stands well and had the patience to sit it out under adverse conditions.

The surrounding terrain was thick—typical of top whitetail habitat—but I had chosen a log with an excellent view of the trail. Not long after the tyro hunter passed 50 yards to my right, I heard the scampering of hooves that is so typical of deer on the move in the woods. The sound came from the direction the novice hunter had gone. He obviously had spooked some whitetails, and they were headed down the well-used trail to my left. Anticipating a buck, I felt my heart pound faster.

It sounded like more than one deer. It wasn't long until a doe stepped nimbly along the trail, occasionally looking over her back trail. She was followed by two more antlerless deer, one a fawn. I hoped a buck would be bringing up the rear.

I was downwind, and knew how quiet and motionless I had to be. When the last big old doe on the trail kept looking back, I had hopes she was silently telling one or more bucks that the path was clear.

Suddenly a beautiful forkhorn emerged, making his way in almost total silence. I admired his antlers, tensed my muscles, but waited. I wanted to be sure that an even finer trophy wasn't behind him.

Sure enough, an 8-point materialized. He knew he was the king of this band, and he showed it. I waited until the range was 30 yards and he was directly in front of me. Slowly I raised my rifle. The shot was almost an anticlimax.

All my preseason planning and previous experience had borne fruit. I had used many of the cards in my whitetail hunting deck. The idea that anyone can consistently score on deer without a thorough knowledge of their habitat and their cunning ways is more than mistaken. It's foolhardy.

If you want to consistently score on whitetails, take some of the advice put forth in this article. These suggestions will help you become not only a better deer hunter, but a more successful one. The excitement of the hunt, the preseason planning, and the growth of your knowledge add to the satisfaction of the shot that eventually brings your game to bag.

Whitetails are one of the most cunning big game animals any one can hunt. Good numbers of them live in areas close to millions of people and they have the adaptability to propagate in many types of habitat. Learn their ways, and you will score.

FIRST & FINEST

By Keith C. Schuyler

CRIMSON FROSTING spread against long cloud fingers as the first-day deer sun settled of its own weight behind the nearby mountain. The fiery setting belied the actual atmosphere, for it was cold near the orchard where I stood on the edge of the thick birch saplings. It had not been a good first day for me to that point.

Then there was a shot.

It came from the direction of an apple orchard several hundred yards to the west. My eyes fought the dying glare through cold-induced tears to check the pounding form cutting through scattered trees and bushes to my right. It was a doe. I lowered the slug-loaded Spencer shotgun, disappointed, as she crashed into the thicket.

Then another bobbing form took shape. This time I dropped to one knee to silhouette the animal's head against the red glow. It was a buck—the biggest white-tailed buck I have ever seen alive. There was no mistaking the big rack as the deer skidded to a stop at my movement. About 90 yards. I held, and squeezed.

And missed.

At that moment, in 1937, I had been hunting for only about an hour. The sun sets during the first week in December at about 4:45 in our neck of the woods. Legal hunting then was to 5 p.m. And it had been necessary for me to work until 3 o'clock, an hour more than usual. An unsympathetic employer chose that day to give me extra duties in the receiving department, even though I had previously asked for the first day off to go deer hunting. Jobs were scarce and there were economic reasons to discourage the temptation to go anyway.



IT TOOK SCHUYLER two weeks' work to pay for it, but the author has never regretted having the big buck's head mounted back in 1937.

My father and brother, Stan, were more sympathetic. They knew I had looked forward for months to this day. We had planned to hunt with some friends at a favored spot near Red Rock Mountain. It was a tradition of long standing.

All Dad could offer to ease my pain was sympathy. Stan did a little better. He gave me the keys to his Model A.



STANLEY SCHUYLER, of Schuyler, Pa., is the present owner of the old Spencer shotgun used to bag the big buck. Note top ejection mechanism.

"You can go somewhere around home and get in some hunting before the day is over," he offered. But he didn't sound too convincing. There were not too many deer in the nearby area in those days, and I wouldn't have time to go to one of the better spots in the low mountains of Columbia County. Anyway, I was too busy during the small-game season to locate any local deer.

Saw Two Does

My situation was anything but encouraging. And, yet, I did plan, after a fashion. Toward the end of the small game season, I had seen two does near a birch thicket about four miles above my home in Berwick. Usually, there is a good chance of a buck being in the same vicinity when you spot lady deer. For lack of a better idea, I decided to head for the birches when I finished work. It was my first job after being graduated from high school that spring, and I had swallowed my disappointment; 29½ cents an hour wasn't to be sneezed at.

That last hour at work was one of the longer ones of my life. When it was finally over, the Model A was halfway up the first block before I got the door shut. It coughed and gargled to a stop in front of my house as I slammed through the front door on the way for my equipment. All of it, with the exception of the 12-gauge slugs which I had carried since age 13, was somewhat older than the 1929 Ford. I had yet to get my first shot at a deer.

My hunting jacket was a tattered hand-me-down that more than covered my then slender 132 pounds. It had an only slightly leaky game pocket in back, and some of the shell loops were still stitched enough to hold a handful of 12-gauge shells. I didn't take time to change footwear. Just grabbed the Spencer and my cap, and repeated the slam on the way to the coupe. Mom's best wishes trailed my wake.

That shotgun deserves more than a name in passing. It was, and is, quite a gun. Warnings hadn't been properly circulated about Damascus barrels at that time, and the worn tube of the repeater shouldn't have had anything harder than an olive shoved through it even then. But it would

keep a slug or a "pumpkin ball" close to your hold at up to 75 yards. It never rebelled at the much-too-heavy loads we collectively blasted through it each season. I say collectively, because every hunter in the family used Grandpa's Spencer at one time or another. It is one of those guns that seems to fit everybody with only a little squeezing or nudging to get her set right.

Some years before an attempt had been made to get the old gun repaired. An answer came back which indicated the Spencer Arms Co. had been out of business some 40 years at the time. Consequently, this example of the first successful repeating shotgun in America was no longer completely successful. In fact, it was necessary to lift the top ejecting mechanism by hand after each shot so that the spent shell casing could be extracted. Admittedly, this did slow down the action, but it didn't interfere with accuracy of the arm.

Somehow I managed to get inside the Model A before it took off, and together we headed for the birch thicket above the apple orchard.

My enthusiasm, despite the problems, was at fever pitch when I arrived and parked the car along a dirt road near the birch thicket. But the utter futility of the venture set in and cooled my ardor even faster than the temperature. By the time I had walked the length of the thicket I was almost tempted to turn right around and go home. There was no one else about, and I heard no shooting. At that time on the first day of the season, there should have been some activity to indicate that it *was* the deer season. But I didn't hear even a distant shot.



There was only the cold that fogged my breathing as I headed slowly back toward the car. I was cutting both time and distance short by taking a diagonal path inside my outgoing trail.

Both the first day and I were edging close to quitting time when a single shot came from up in the orchard.

It is no discredit to the Spencer that my first shot missed, even though I had dropped to one knee to steady my shivering torso and line her on the startled buck. At the shot, the big deer cut to my right on approximately the same course taken by the doe.

I jerked the ejector and pumped another shell into the chamber. Between clumps of brush I could glimpse the big buck charging toward the birches. I slammed another shot at him but failed to connect.

He Ran, I Ran

Since the buck was angling to the right, I took off in an attempt to intercept him. He stopped behind some bushes, and I sent another slug his way. He ran, I ran. Again, I went through the routine of shooting and working the Spencer.

Finally, both the buck and I were running low on fuel. He had taken a long run from far up in the orchard before my hundred-yard dash to keep him out of the birches where he would be gone from sight in an instant. Once more he stopped. Again I dropped to one knee to steady myself and the Spencer.

The mighty one presented a sight that will ever be fresh and majestic in my memory. He was in a clearing of the now more sparsely vegetated field where a power line still sections the plot. Against the bluing gold which marked the departed sun be-

hind the mountain, the buck's heavy breathing drifted up to his massive antlers like mist through dead branches coming from a cold morning pond. I lined the single bead of the Spencer on a spot behind his right shoulder. Squeezed.

At the shot, the buck reared up on his hindquarters, slashing at the end of the day with his forelegs. Then he collapsed backwards.

I hurried to the downed deer. It was still alive, so I leveled the Spencer at the base of his neck and pulled the trigger. The shotgun only clicked. A hurried search revealed that I had no more shells!

Not Needed

However, they weren't needed. The slug had actually hit just forward of the shoulder, broken the buck's neck, and then lodged under the hide on the opposite side. I later stepped the distance off at 70 yards.

This was my first chance to use the hunting knife I earned selling peanuts with the Boy Scouts. By the time I had the animal field-dressed, it was nearly dark. I tried, unsuccessfully, to drag it with one hand. Finally, I found that the only way I could move the carcass was to grasp the base of an antler with each hand and then walk backward.

With the Spencer cradled in the game pocket of my hunting jacket, I backed a few steps at a time toward the waiting Model A. By the time I had retraced the first hundred yards, it was quite dark. Fortunately, a resident of the area came along the road about that time, whistling accompaniment to probable apprehension on the lonely road, and I called out to him. He responded, and together we dragged my buck to the car.

I took him to his destination some distance in the opposite direction. He gave me some rope so I could fasten the deer more securely to the fender of the old black coupe.

Meanwhile, Dad, Stan and the balance of two carloads of hunting friends had arrived home. As luck would have it, they hadn't seen a deer all day. But since they had some 25 miles to travel after their hunt, considerable concern ensued. It was known that I had but a few miles to travel to my intended hunting area and they were worried because I wasn't home yet. But before a search party could be formed among the tired hunters, the Model A delivered the buck and me at my father's door.

Strangely, perhaps because I had never killed a deer before, I was not at the time unduly impressed with the size of the deer or its antlers. Its weight had been a matter of concern only because of the trouble I had getting it home. It was not until neighbors and friends began to exclaim over both the size of the animal as well as its head adornment that I took a closer look.

"You better get it mounted. You'll never get a bigger one," I recall one saying. His words proved prophetic to this day.

The buck's head was mounted by J. August Beck, of Duboistown. Heads were priced according to size. Mine cost the maximum of $25. At 29½ cents an hour, it took over two weeks' work to pay for it, but I've never been sorry. The old fellow still looks pretty good.

While far from a record breaker, the mounted head did score 123rd in the first antler measuring awards program of the Pennsylvania Game Commission in 1965. The 12-point, symmetrical rack measures 21½ inches at the widest point and total was officially listed at 140-3.

On the platform scale at the mill where I worked, the buck weighed in at 180 pounds, field-dressed. The boss was unhappy that we used *company* property to check it. I finally did quit that man even though he inadvertently provided me with one of the days in a lifetime of hunting when the Red Gods smiled.



MY MOTHER ALWAYS cooked game without trying to remove any "wild" taste; nothing was trumped up to taste like something else.

For Game Cookery . . .

Take the Simple Approach

By Byron W. Dalrymple

I DOUBT THAT anyone has been more fortunate about eating than I. Or maybe, looking down at my nowadays rather bulging beltline, that isn't quite right. Perhaps I've been a little too fortunate!

When I was a kid we lived on a little 40-acre farm. My father taught country and small town schools. Moneywise we were poor. Today when my brother and I get together we always laugh about it, because we didn't know as kids that we were poor. That's just how it was. Today there'd be six federal case workers hovering over us, and probably a psychiatrist or two back in the social worker's office figuring out cures for the awful traumas we youngsters were going through.

We never had a marinated piece of meat served with a quadruple-condiment sauce, nor chicken with an imported cheese simmered with broccoli and artichoke hearts. We poor kids had to sit down to meals like a big home-cured roasted ham, or to a heaped-up platter of chicken—not today's pallid fryer but an honest-to-God hen or old rooster with meat on it—that had been parboiled, then floured well and browned in enormous gobs of real butter that had come, via the old dash churn, from our own cows. After browning, my mother placed the pieces in a big earthen dish with a cover and baked it for a spell in the oven of the wood stove. We also had pheasants by the dozens each year, fixed the same way. Indeed, we suffered. We were so dumb we thought we were happy as larks!

My mother often cooked game, and always she approached the task with the same basic thought in mind: whatever you ate, you were supposed to know what you were eating. Nothing was to be trumped up so it would taste like something else. If it wasn't fit to eat in natural form, you didn't eat it. The basic approach: if there were a couple of cottontails on the table they were cooked to taste like rabbit, and a pheasant was never supposed to be messed around with in



WILD CREATURES FORMED the main part of early man's diet, and it's doubtful whether he worried about a wild or gamey taste.

an attempt to make it taste like a chicken.

Simple cooking. I remember with a chuckle that one time we had a whole coon. It was awesomely fat. Now a too-fat raccoon is too fat, that's all. My mother put the whole coon in a big iron kettle and parboiled it. This snugged up the heavy layer of fat and made a firm separation line between it and the lean meat. When it cooled some she was able to peel off most of the fat, and then she roasted the coon. I can still see that critter today as it came out of the oven of that same old wood stove. It was brown and crisp on the outside, and aromatic. And utterly delicious.

I also remember with amusement a lady visitor who lived some distance from our countrified area. Mother was telling her about the coon. She listened almost in horror and then asked if mother had not done something to take the "fur" taste out, to make it taste—well, maybe like pork? Mother said, "If the good Lord had wanted it to be pork he wouldn't have made it a coon!"

Note well that what I am saying here is that a cook of game, to be a good one, should refrain from fiddling around with the normal flavor of the animal or bird involved. It is easy enough to say if you don't "do anything to it," you're really cooking everything about the same way and it will all taste alike. Not so! The plain fact is, there are only a few basic ways to prepare any variety of meat. You can fry it—the most horribly overworked method and responsible for the worst results—or you can roast it, the ultimate result of which most cookbooks admit is about the same as baking; or you can broil it, or boil it, or sear and simmer it.

Those are the fundamental methods. Each of course has variations according to the imagination of the cook, and the methods can be used in combination to some extent also. Some game meats lend themselves better to one basic method than another. But the ultimate purpose should be to get out of the particular variety of game the taste that the Creator put into it, the one that belongs to it and it alone.

Of course, you must also consider what kind of physical shape the animal was in when taken. This is a study in itself, but we can touch upon it at least. In farm and ranch parlance, a beef or other animal is said to be "on the mend" when it is going up in weight. Invariably a deer, for example, that is on the mend, not declining, is tender and good even though not fat. A gray-faced old buck with worn teeth most hunters will tell you is only fit for sausage. But they are wrong. Such a deer, if fat, is as good as any other fat deer. A fawn only recently weaned, spoken of in some hunting literature as a succulent piece of meat, can be so tough you couldn't shoot a hole in the gravy. A deer with yellow fat, set your watch by it, will be a tough codger. One larded with white fat is real quality.

For Tough Meat

Meat likely to be tough should be cooked slowly at low heat for a long time. You have to judge birds, too. A cock pheasant with extra-long spurs is almost certain to need some attention that birds of the year do not. Note that I mentioned my mother "parboiling" the coon. Parboiling means to partially cook by boiling. Modern cooks have lost, or overlooked, the art of combining parboiling with other methods—baking, frying—to make any real old he-bird into a lovely meal. Old-time country people often used parboiling because they didn't eat young domestic birds, just the old ones. I remember my mother cooking roosters so old they dulled the axe blade as their heads were lopped off. Always they were so tender and good it was unbelievable. She did them exactly as she cooked that coon.

When I had flown the home nest and finally got around to marrying, whom should I select but a gal from Westchester County, New York, barely outside New York City, a gal who had never eaten her first bite of game, let alone cooked

any. But since I as a fulltime outdoor writer incessantly hauled varied creatures into the house, Ellen took a marvelous stance. Her logic went like this: she didn't know how to cook it, and so she just cooked it as she'd cook domestic meat that looked a little bit like it. She had been brought up eating broiled beef and roast prime rib and so on, so she not only didn't know any fancy recipes, in the beginning she just knew a few simple ways to cook anything. Thus, how could she spoil it?

Wide Cooking Experience

After a few years she had cooked practically everything that ran, flew or crawled on this continent. And she became the second fortunate—or unfortunate, depending on how you view my beltline—period of game cookery in my life. She's still at at it, doing the same things she did in the beginning. Let me tell you, for example, about the ruffed grouse early in our married life. She liked the looks of these birds—their beautiful feathers. When I had cleaned them, she noted the perfectly white breasts. Reminiscent of chicken.

We didn't go much for fried foods, and I cautioned her early that when you have several game birds together you cannot always determine their individual ages, so frying can mean one tough one, one tender one. She found a narrow loaf pan in the kitchen and fitted four grouse into it, crosswise, their legs humped up a bit. I still recall how beautiful they looked. Correctly she judged that ruffed grouse were not fat birds, and so she copiously drizzled melted margarine over breasts and legs, loosely tucked foil over the top, slid the pan into the oven and set it at 325 degrees.

Not just certain about things, she peeked now and then, adding as needed a bit of margerine and a dollop of water in the pan bottom. In a bit over an hour, she turned back the foil and, adding more margarine, let the tops brown for roughly 30 minutes. This was absolutely all. Know what they tasted like? Ruffed grouse. Superb. The kind of taste you hold on to, closing your mouth and breathing out through your nose to be sure you get every wisp of it.

With growing confidence, she went on to snowshoe hares. Something about these big bunnies has always intrigued me. I remember bringing in a pair, very carefully skinning them, and cutting them so the big hindquarters were separated, the front legs also, shoulder and all, and the back saddles flattened out by snipping of the ribs. Ellen laid these in a shallow roasting pan. She chopped up bacon and a very minor amount of onion, buttered the rabbit pieces lightly and sprinkled the chopped mixture on top. Slid into the oven and allowed to bake uncovered at low heat, this dish turned out so sinfully good that I resolved to hunt snowshoes every day till the season's end.

In this manner, from creature to creature, she began to understand that game cookery should be an attempt not to disguise the flavor but to enhance it, or leave it alone. I will of course not deny that I have occasionally dined on game fixed according to some extremely complicated, fancy recipe that was very good indeed. But most of the time such recipes, dependent upon sauces and numerous seasonings, overpower the true flavor. In other words, you can use the same "fancy" recipe for venison, or an elk you bring home from a western trip, or an antelope likewise, and the meat itself might be interchangeable so far as the taste result is concerned.

In a national magazine I read recently how to prepare doves. The details were prefaced by the remark that doves are dark and so some people won't like them, regardless. This is ridiculous. You might as well say that because a pheasant looks yellowish, not the pasty white of store-bought chicken, it cannot possibly be quite as good. I'll agree with one thing, it is different, sure enough—about six times better than chicken!

Dove Tips

At any rate, instructions were to simply pull the breasts out of the doves as you shoot them, a quick process that "saves all that's worth saving anyway." I'd feel like shooting the cook who so disgraced any dove of mine. The legs and the back and the wings, just as with quail, contain juices and tidbits without which the breast, cooked alone, is a drab offering indeed. In fact, if you want to savor doves in the supreme gourmet manner, try the following.

Make a point of shooting with as many cronies as possible. You can bet not one will save the livers, hearts and gizzards. Tell the others that if they'll pluck 'em, you'll clean 'em. As you do, drop all the little "goodies" into a plastic bag. Put it on ice, and when you get home carefully finish by cleaning the gizzards. If you're lucky enough to shoot with five others and everyone happens to get limits, that's a real batch of giblets.

Lightly flour your whole birds. Put a very small amount of oil or margarine into the bottom of a cast-iron dutch oven. Get the heat up and quickly sear the doves, turning them to brown every nook and cranny. Now turn the heat down very low, add some water, and if you like cooking with wine, slosh some in—you

don't have to measure it. Sherry is fine, but any good red wine will work, and so will vermouth. Put on the lid and let the birds very gently bubble and simmer. Meanwhile, flour and brown the whole batch of giblets in a separate pan. Pepper them. Within a half hour, pour them in. In about 1½ hours (total) the birds, young or old or mixed, will be so tender the meat will practically shake away from the bone. Lift them out, thicken the gravy. Serve doves and gravy separately, the latter of course to go over copious servings of mashed potatoes.

The above is in our estimation plain wonderful old-fashioned cookin'. You know precisely what a dove tastes like . . . the **whole** dove. Incidentally, my wife occasionally uses this same method for ducks, and has done it with delicious results with geese of modest size. You must of course properly judge how long to let larger birds like those simmer. Quail fixed the same way are one of our favorites.

There is another way to cook both quail and doves that I'm sure few Pennsylvanians have ever tried. I learned it on one trip down on the Mexican border, where we hired a Mexican cook for the camp. Like many Mexicans used to round-up-camp and other outdoor camp cooking, this man was extremely adept at fixing a mesquite fire and hunkering down to cook over it on the ground. He tore foil into squares, wrapped two thicknesses loosely around each bird—mourning doves, whitewing doves or quail, whichever species of bird we'd shot that day.

RABBITS, PHEASANTS, grouse—all make royal table fare, especially when prepared to allow the natural taste of the animal or fowl to remain.



But before closing each foil he had greased, salted and peppered each bird, squeezed a quarter of lemon over each—and stuffed a very tiny Mexican pepper into the body cavity of each. Then sealing them, he buried them in ardent coals for about an hour. We simply raked them out, gingerly opened them, and kneeling down ate them out of our hands, with nothing else to go with them. Unbelievable!

Pepper Tangy

This recipe can be varied, of course, in case you don't like the piquant tang of the pepper. I also learned from this same outdoor cook how to barbecue quail. Bear in mind that quail are dry birds. Get a good bed of coals, or if you have a charcoal broiler with a hood, you can use it to good advantage. Brush the birds with oil and lay them on a grill. Keep it well above the coals. The idea is to cook them **very** slowly. Some of his best were "barely warm" but stayed on the grill for about four hours. You have to stay right with them, basting them often, either simply with oil, or if you must, with barbecue sauce. That gives them a reddish color and a pleasant flavor, but I prefer just the "quail" taste. This is a superb method, incidentally, for cooking squirrels whole, too.

Because of my business, I often have had to travel out of my home state to several others during a deer season, on assignments for various magazines. And this has on occasion faced us with the awesome proposition of three or four deer to take care of. Having practically raised our two sons on venison—until their joke was that beef was "that gamey old stuff!"—we long ago became mighty persnickety about our venison.

Because venison is the universal wild big-game meat all over the nation, reams have been written about how to and how not to cook it. Scads of recipes I always suspect were concocted by persons who wouldn't know a buck from a doe. Their chief aim seems to be to "do away with that wild taste." Let there be no error, some deer have it. A buck at peak of rut or skinny as rut ends is sometimes really unfit for human consumption. But deer "on the mend" and prior to or some weeks after the rut as they build up again, don't need tampering with to make them edible.

Again, ordinary frying and deep frying (boiling in oil!) are probably the world's worst ways to prepare venison. Maybe I'll get an argument. There's no accounting for tastes. The only concession we make to the frying pan is as follows. We invariably bone out the backstraps of all our deer. This means lifting the shoulder blade and starting way up at the neck and

gouging clear down to the very edge of the ham, getting an extra-long, boneless tenderloin from each side.

We cut the backstrap crosswise into fillets at least an inch thick, and sometimes a bit thicker. Butter or margarine is now melted in an iron skillet. When the skillet is very hot, the fillets, shaken in flour—never, never in corn meal!—are dropped into the sizzling butter. Give them no more than five minutes on a side, and if you like rare to medium meat cut it to three. If you must have yours well done, of course leave them longer. This is venison at its non-messed-up best. We also cut fillets the same and, without flouring, of course, broil them just until they remain pink in the middle. I rather like the pan broiling better, because they seem a bit juicier.

A good many game cookbooks will tell you about using venison roasts of three or four pounds. Unless you intend to pot roast it—that is, brown it, add a bit of water, cover and simmer—a small venison roast is likely to be a dried-up nothing. For many years we've cut up our own deer. A big whitetail offers hams of 15 or more pounds each. So will average mule deer you may bring home from a trip. We cut these in half, butt and shank, and my wife cooks these big roasts by placing bacon strips on the ham half, peppering but not salting, wrapping in foil and roasting at about 325 degrees if there is ample time. Just let it go until done.

The only concession she will make—and it's a fine one—concerns using a package of dry soup mix, either onion or mushroom. Spread the foil in which the roast will be placed (a shoulder of course is just as logical, whole) and shake half the dry mixture from the envelope evenly onto it. Put the roast on the foil, place bacon strips on top, distribute the remainder of the dry soup mix over the top, close the foil, and pop it into the oven—same temperature. The aroma alone is delicious, and the effect of the dry soup is not one that inhibits the venison taste.

I want to mention that the barbecue craze is as everyone knows rampant in all kinds of cooking today. But "barbecue" has many connotations. All too often it is translated as larding some kind of barbecue sauce onto meat. The idea of barbecuing—which was originally an old Mexican and Southwestern one where sharp sauces are concerned—has spread all over the country. What barbecuing **really** means is placing meat over coals and allowing it to cook, on a spit or otherwise, slowly. Sauce is not necessarily included.

In the town where we live, several places do professional barbecue cooking. The reason I suggest trying a comparable one, if you have one near you, is that I am going to recommend use of a large piece of meat. And large roasts require, for best results, large areas in which to cook slowly. Let's say you have bagged a big whitetail. It field-dressed at 155 pounds. That means whole hams of perhaps 20 pounds, halves at half that. Or suppose you've been out of state and have brought back moose, elk or mule deer.

Whether you do it at home or have it done, brush a large roast with plain cooking oil. Get it over the coals in a hooded barbecue pit at 6 or 7 in the morning if possible. Mind now, the coals must be gentle. Smoke wafts up. Gentle heat rises. Don't think of this as a cooking process, even though it is. The lower the heat (with cover) and the longer the period, the better. Give it a full 12 hours, brushing the meat occasionally with oil. Fast heat shrinks meat. Slow heat keeps the body in it. Twelve pounds shrinks in 12 hours to perhaps 9. If you like some kind of commercial barbecue sauce, lard it on. But if you want a big piece of wild meat—whitetail, elk, moose, sheep—divinely cooked, don't try to flavor it! Just let it alone.

Braised Muskrat

My outline here may seem repetitive. It purposely is. Keep it simple, like "mother used to make it." We ate braised muskrat when I was a kid and it was marvelous. Just because it's simple doesn't mean there are not variations. But you can ruin wild meat by fiddling around trying to alter it. For example, we have friends—a couple—who are avid turkey hunters. We were invited to eat a wild turkey at their house. I was literally aghast when, at the table, we were served fried sliced fillets of turkey breast. Tough? It should have been clubbed back into the pan! It tasted, with cornmeal on it yet, about like brown corrugated cardboard crusted with grease and cornmeal. A desecration. A wild turkey—hopefully fattened on acorns—is to be roasted. That's all. Just wrap it in foil and roast it. When it is nearly done, open the top of the foil and brown the breast skin. For taste, a wild bird, with its narrow, steeply slanted breast, is far superior to the broad-breasted tom of the markets.

There are of course numerous game cookery variations that one can use, based on the theme of simplicity that I've outlined here. The trouble with adding condiments and concoctions in preparing wild meat is that this game never ends. The more you try to be different, the more different you try to be—and the less taste you have of the bird or beast with which you started.



EXCEPT FOR HIS WHITE blaze and topknot, Mephito was coal black, the blackest and biggest of the litter of nine skunklings.

MEPHITO of the MANDHO

By Carsten Ahrens

TWILIGHT had come to the old Mandho Swamp. The awful heat of the mid-August afternoon suddenly lessened, and a breeze from the northwest set the cattails and wild rice waving. The evening's first nighthawk, zigzagging through the sky, plummeted to earth in quest of a June beetle that had just begun its evening activities. The bird's sudden reversal of its dive pattern seemed to rip into shreds the mists that were beginning to rise from the green-mantled, crowded waters. The bird was soon high aloft again, uttering its weird cry of "pe-ent . . . pe-ent," then again plunging swampward with suicidal abandon, only to abruptly change its course with a groaning wind-through-feathers sound that shuddered through the reeds and rushes.

It seemed an overly melodramatic effort for securing something in one's diet as simple as a June bug . . . or so Mephito thought, for the sound had awakened not only Mephito but the entire skunk family from a day-long nap.

Mephito's mother had selected for her nursery an ancient culvert under a lane that led into the swamp. A new dredge cut close by had left the tiles high and dry; the den was also dark, for a thicket of buttonweeds grew at each end. Actually, "selected" hardly described her choice; she had been born here and she had used the now-dry waterway twice before to bring good-sized families into the world. It was a well-hidden den with escapeways at either end and a handy secret tunnel that began where a center tile had broken years before. Mephito's mother had enlarged it to exit into a group of young papaws.

Except, of course, for the line down his nose and his white topknot,

Mephito was coal black, the blackest and biggest of the litter of nine skunklings. They had been born back in May, and all wore their white skullcaps well back on their heads. All except Mephito had two lines of white that triangled away through their glossy black coats. Most of them also had considerable white hair at the ends of their plume-like tails.

Mephito was different in another way: while the others followed their mother in a neat line when they were out on a tummy-filling safari, he was always striking out on his own. That always brought a halt to the game. His brothers and sisters complained, while his mother got him back in line. Each time this took longer, for as he grew older and bigger, he became more and more of a problem.

That evening Mephito felt completely at odds with his family's world. He knew when he awoke things were going to be different. The night sky was simply strewn with stars when the family started out. They waddled over the crest of a little hill, nine plumes waving in the breeze. Mephito stopped and watched them go. He was last in line, which was unusual. When the last one disappeared, he turned his back, waved his plume, and ambled off to independence.

Mephito had hardly shuffled along for three rods before he wondered if he hadn't made a big mistake. In one of the lower limbs of a densely leaved black willow, old Great Beak, a great horned owl, hulked angrily. Two redwing blackbirds were still screaming hoarsely at her . . . all that remained of the flock; the rest had trickled away long before, since it was well past their roosting time. The owl's great head slowly arced as her yellow eyes searched the gloom. Great Beak was not especially annoyed with these midgets; she was just hungry. She hadn't been really successful in assuaging her hunger for the last three days. The bird, once a terror in the swamp, was old. Now when she swooped down on an unsuspecting rabbit, sometimes she completely missed her prey and crashed into one of the thorny shrubs that grew in profusion in the swamp. Her hunger drove her on but her old hunting skills were deserting her. She grumbled in annoyance in the willow.

It was at this moment that Mephito galloped under the willow, his white topknot throwing off gleams like those of a failing flashlight. The grumblings caused him to stop and turn his bright little black eyes into the glare of the owl's great yellow ones. Great Beak, in years past, had killed many skunks. Mephito was young and plump, and Great Beak was hungry.

Fatal Plunge

Her plunge was a fatal mistake. As the bird dropped through the darkness, Mephito instinctively arched his back and sent a stream of yellowish, burning, nauseous liquid into the owl's face. Then he dived into a pile of leaves at the base of a swamp oak where he found a hole that led him into a large cavity in the old tree. He lay for a long time in the dark wondering what to do. He could hear the blinded bird flopping about outside like a decapitated fowl.

A weasel in her tunnel at the willow's base had been just about to set out on her evening hunt. The owl-skunk encounter seemed almost too good to be true . . . a chance to kill an ancient enemy and to enjoy her blood! But she would have to hurry; the effect of the spray might dissipate. With a leap the weasel buried her teeth in her old foe's throat. But although the owl's talons were old, they were still very sharp, and they closed around the weasel, stabbing through the small animal's hide. Neither the owl nor the weasel could or would let go, and after much thrashing about that bloodied a bed of wild flags, both died in this unseemly embrace.

A raccoon, heavily masked, passed by on his way to the sand beach and

observed the now-quiet pair; then he daintily moved on . . . here the stench was overwhelming.

Mephito investigated his newly-found cavity in the old white oak and found it much to his taste. It seemed completely without scent of any other occupant, so he left his signature in several places. Then his empty belly urged him to go hunting and he shuffled along the shore where the muck of the swamp became the sand of the lake beach. The light from myriad stars had changed the swamp and lake into a sketch in old silver and ebony. The skunk tried a trick he had learned from his mother. He turned over a bit of driftwood and was excited to see a nightcrawler gleaming in the starbeams. In his haste, he seized it at one end and jerked off just a part as the creature slipped out of sight down its tunnel. He quite forgot how his mother always pulled out the entire worm patiently. One's jaws or foot must hold the slippery creature without cutting it in two. If one just held on long enough, the worm's muscles holding it in the tunnel would be forced to relax and then the entire animal could be drawn out effortlessly. Mephito nosed about other drift-things but found no more nightcrawlers, only a little red centipede that nipped him saucily.

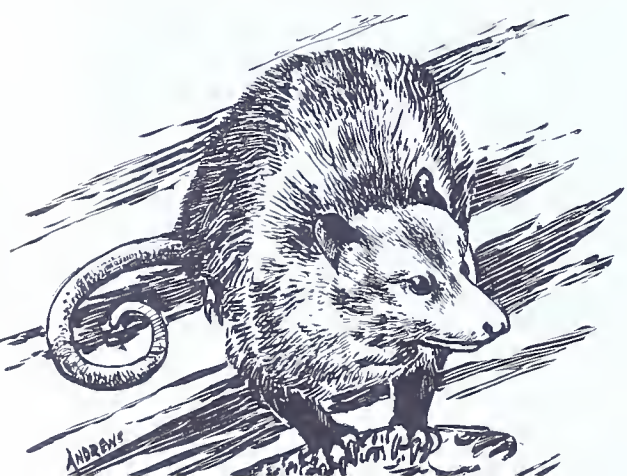
When he left the swamp a clean, broad beach spread out along the lake in front of him. At first it seemed that the dimly lit shore was completely deserted, but then Mephito smelled the odor of a fish, a sheepshead, that had been washed just above the reach of the biggest of the wavelets. But something had beaten him to it. An opossum, with its long, pointed snout had arrived there first.

Mephito warily made his way around the marsupial and its meal. The opossum rose to its fullest height and hissed. The little skunk had often met this thin-haired, toothy creature before, but only when his mother was along, so he just made little dashes toward and then away from it. The opossum held his own, eating rapidly at the fish and then rising and hissing when Mephito approached. On one of his charges, the skunk skidded and slid right into his rival. To his amazement, the marsupial fell over, straddling the tattered sheepshead. Mephito smelled about his fallen antagonist, prodded the stiff form to one side, and bit off several chunks of fish. Even though the flesh was to his liking, there was something about that stiff form lying there that didn't seem quite right, and Mephito hobbled on down the beach.

Later, when the thought of those good morsels made him detour to return to the spot, he stared in amazement. The opossum was gone and only the bare bones and scales of what had been a plump sheepshead were left. Life was full of mysteries, but Mephito hadn't time to do more than wonder briefly.

Then a fond memory caused Mephito to leave the sandbar and make a trip to the farm on the edge of the Mandho Swamp. He revisited the empty brooder coop and the corncrib under which his family had hidden the victims they had been unable to eat that night a month before. The nine skunks and their mother had gotten into the warm brooderhouse and killed the entire flock of 58 leghorns shortly out of their fluffy stage. It was a warm night, and they made many trips storing beneath the corn crib all the

MEPHITO WARILY made his way around the opossum and its meal. The marsupial rose to its fullest height and hissed.



young chicks they couldn't eat. That night he felt life was most wonderful and all of them were so stuffed with chicken that they could hardly waddle back to the old culvert. They slept for hours and hours, digesting their midnight banquet. Two nights passed before hunger sent them back to the corncrib where they discovered the farmer had raked out all the chicks they had hidden. They found where he had buried the tiny birds, but the stones piled over them were too heavy for the skunks to move. That night their mother taught them to catch crickets, but they were a poor substitute for chicken.

But tonight there wasn't even a cricket chirping. Mephito was about to leave when a pleasant scent led him to the doghouse near the farmhouse. Here a big hambone with plenty of the fat and skin remaining was lying in Rover's dish, and the dog was nowhere about. Mephito ate and ate. Suddenly, and much too soon, the side door opened and Rover was put out for the night. Pretending indifference, Mephito shuffled away. The two had met before. The dog was old and nature-wise, and although he barked, he didn't attempt to stop the skunk. A puppy is apt to fall upon a skunk, but only once. A mature dog, unless ordered by his master, will bark at but usually leave a skunk alone. The first lesson is so painful that a second is unnecessary.

Mephito decided to visit the farm dump. When he was about to climb up on the log that bridged the brook, he was suddenly aware of the black silhouette of a porcupine resting in the very center. His mother had taught him to respect the spiny ones. Porcupines were like skunks in a way: both had poor sight and both were rather hard of hearing, but nature hadn't forgotten them, equipping both species with armament that every experienced animal respected. So the little skunk waited until Porky decided to continue on his way.

One never knew what might be found at the farm dump. Often there were discarded vegetable parings, wrinkled apples, old potatoes, cobs of sweet corn, even the body of a calf that had died or dead chickens. It always gave the skunk family a sense of satisfaction when scavengers already gathered there drew back to allow the ten of them to look over the tidbits. Mephito noted how rats, raccoons, opossums, muskrats, even occasional mink or bear, paid deference to them and also to any porcupine that might come in, mumbling, as usual, to himself.

Nothing at Dump

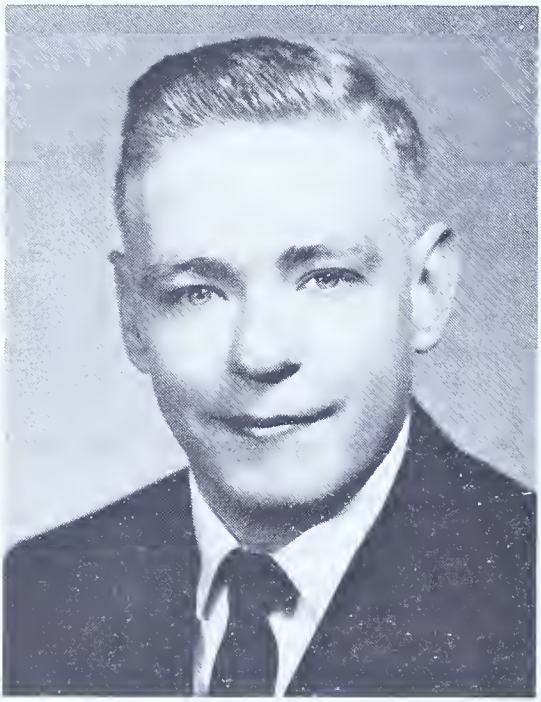
But tonight the dump was lacking in anything to eat. Not even a brown rat was in evidence among the broken-down machinery and fencing.

Just before dawn, when only the morning star was still gleaming in the sky, Mephito was on the old log that spanned the brook. He was within sight of the old culvert and watched his family return from their night's adventures. In a few moments they would be snuggled together, soon be sound asleep with rounded bellies and contented snores. If he joined them, mother skunk would smell him carefully, and from the different aromas clinging to his thick black fur be able to reconstruct many of his night's ventures. There might even be something left over to eat. On their last trip, his mother had dragged home half a Plymouth Rock rooster that had been hit by a car; there would surely be some bones to gnaw on.

But it had been a great lark to be on his own, to have found a den for himself at the base of a great swamp white oak, to be free to do as he pleased. Still, food was good, and his belly was quite empty. For a moment he wavered. Then independence won. He turned and made his way through the brightening swamp to his newly-claimed den, and when the sun peaked over the sandbar, Mephito was in the oak. His belly wasn't full but he was sound asleep.

Dave Couldn't Stay . . .

By T. R. Them



DAVE SHOULDERED his new 300 Winchester Magnum, and headed into the hills for his first big game hunt away from home. He knew his rifle would do the job, for he had helped build it, and had carefully sighted it in himself. Deer, elk, moose, caribou . . . he was ready for 'em all!

This was the day he had anticipated since he began hunting at age 12. Sure, he had hunted local whitetails, turkeys, woodchucks, and birds. But, they were only the preliminaries. He always knew this day would come, if not this year, then next year would have to do. Each unborn day would give him more time to get his gear ready or bone up on ballistics. Dave dreamed and planned ahead. No detail was too small to be left to chance.

Only thing is when you and I are planning for next year's hunt, Dave won't be able to make it. For he left on his big hunting trip just after Christmas, the hunt he will never return from.

David J. Curry was born in 1948, and left this world in 1975, at the age of 26. His lifelong burden was extremely poor physical health. It greatly restricted his activities. Unable to do many of the tasks we all take for granted, Dave would not admit defeat and tried 'em all anyway. He mastered the rifle, pistol, shotgun, and bow and arrow. He reloaded his ammo, and could tell you just what it could do because he tested it thoroughly. He was active in the local Jaycees, a volunteer fireman, and a practicing environmentalist before the word became popular. Dave accomplished all this because he gave it his all. And if you were a hunter, then you were his long lost friend forever.

I first met Dave at a church supper, where the menu was moose and the program was color slides of the moose hunt. Dave sat right up front, his eyes shining, radiating enthusiasm. He asked the first and the most questions about the trip. Later, at several meetings of a community service club, I presented programs on reloading, rifles, shotguns, and custom rifle making. Dave was there, too. Again, he was all interest, fairly quivering with excitement. He wanted to know more about everything concerning arms and hunting.

Soon, Dave was a regular visitor to my home, spending hours with me at the loading bench or assisting at the workbench. When he worked up the courage, he finally got around to talking about the possibility of building his dream rifle. He

wanted a big bore, made to his specifications, and, could he help make it? We settled on the 300 Winchester Magnum cartridge, and from that day on, Dave was either on the phone talking about his rifle, or helping do the work to the best of his ability.

Shortly before the last deer season, the gun was completed and taken to the range. Various handloads were tried, the best load determined, and the final sighting-in accomplished. Dave was now ready. He had three deer to his credit from former years, but they didn't really count. He now had a special rifle, one he'd helped build, and he would try for a special deer. He was a born hunter, and to him, success was just a matter of time. His hunting license fee was well spent, he figured.

Well, Dave didn't find that special buck last season, but he knew he was equipped for a future encounter. He talked of where and when he would hunt next year. And he wanted to make that long dreamed of trip to the West for bigger game, too. Pennsylvania hunting was great, but the big country and bugling elk beckoned.

When I took his Christmas present to him, I found him resting at home following several hospital confinements. Dave took one look at the box and told me that muff-type ear protectors were just what he needed, that now he wouldn't have to borrow mine. How he knew what his present was, I don't know. But he did, and was content. He was forever alert and interested. He still had bigger and better things to attain, even if he was laid up now.



You say there's nothing unusual about that, lots of hunters think that way! Mebbe, but you didn't know Dave as well as I. I've told you how much he was able to do, and how big his dreams were. But did I tell you that from the age of six, a walk of only 50 feet left him breathless, that he couldn't run, play or work at all?

Dave's enthusiasm carried him of its own momentum. He was determined to be a hunter and sportsman. No one pushed him or carried his load, he did what he could by himself. A missed shot or a canceled hunt did not slow him down. In his mind, there was always tomorrow, and he would be ready. And there was still a hunting trip West . . .

But Dave won't hunt with us this year, he couldn't stay with his family and friends.

So, if the boy you hunt with gets discouraged because the weather's bad, or he saw no game, or he missed a shot, tell him about a hunter named Dave. And tell him that our world is better because there are hunters who do what is nearly impossible to do and are willing to stand up and be counted.

High Country Critters

Although they are called "sheep," Rocky Mountain bighorns do not have coats of wool but merely very short hair. In winter, a layer of fuzz grows between the skin and outer guard hairs to keep the animal warm.



JIM ROCCO, Clarksburg, above, and his 358-lb. Clinton Co. bear. Below, Frank Rhoades, Corsica, and fine archery buck.

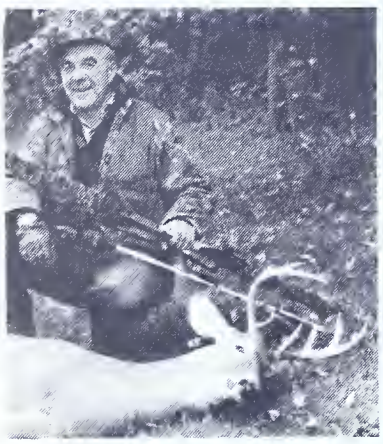


JIM KODLICK, Beaver Springs, above, with his Snyder Co. 10-point taken near Troxelville.



AL CIELO, Mon
bagged in Indi
Workinger, Hu
lb. gobbler.

Some Penns





JOHN HADIX, JR., Windber, and his 15-lb. Somerset gobbler.

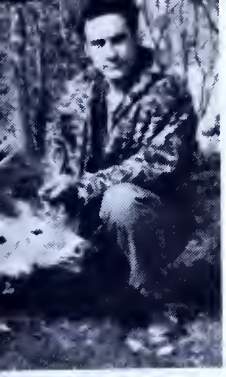


CHARLES F. MYERS, o
fine whitetail trophies.

CLIFFORD KANDEL, Chancey Miller and Roman Miller, Benton, Ohio, and their Warren Co. deer. Right, Jim Furry and Debbie Smith, Guys Mills, and their Crawford Co. 8-points.







with 5-pointer
. Right, John
, and his 19-





GARY JOHNSON, Corry, and son Darin with big Erie Co. buck. Below, Chuck Farland, Monaca, and his 18½-lb. Forest Co. turkey.

ania Trophies



er, with two



ROGER M. MOBLEY, Philadelphia, took above buck in Luzerne Co. Below, Waynesboro members of Lucky 8 Camp in Centre Co. with their deer.



FRANCIS O'BURN, right, Belleville, and Gerald Yoder with O'Burn's 292-lb. black bear taken in Huntingdon Co.





FIELD NOTES

Bear Trapper Supreme

PIKE COUNTY — Gary Alt, of Moscow, works the bear research program out of Penn State University. Recently he set a live culvert trap to catch a nuisance bear to take data on, tag and release. When Gary checked his trap he found a sow and three yearlings in the trap and a fourth yearling lying on top of the trap. I think this must be some type of record for trapping bear.—District Game Protector W. E. Shaver, Hawley.



Different Rattles

JUNIATA COUNTY — While on patrol at the foot of Shade Mountain on the last day of spring gobbler season, I happened to check a hunter returning from his hunt. He didn't have his gobbler, but he did have three nice, lively, buzzing rattlers that he'd picked up during his hunt. Well, different strokes for different folks.—District Game Protector R. P. Shaffer, Mifflintown.

Real Outdoor Education

CUMBERLAND COUNTY — For the last two years I've had the pleasure of presenting a program to the Hampden Township Elementary School Outdoor Laboratory. For an entire week, the fifth-grade students have their classes in the outdoors, eating and sleeping at a church camp. I think the teachers and parents who organize and assist on this very worthwhile program should be commended for their good ideas and carrying through with this back to nature classroom. I hope the trend catches on with more schools.—District Game Protector J. P. Filkosky, Mechanicsburg.

Everybody Out

LUZERNE COUNTY — Received a complaint that a deer was in a doctor's swimming pool and would I come and help it out? I asked PR Area Leader Harshbarger to assist me in this complaint. We arrived at the doctor's home and saw a young deer in the pool trying to run on the slippery, painted deck. We laid the cover of the pool on the deck and the deer was able to gain footing and jump out of the pool.—District Game Protector E. R. Gdosky, Dallas.

Another Use for SGLs?

On June 7 there was a wedding on State Game Land 211. I don't know if this is a first or not.—Land Manager K. M. Zinn.

Fakeout Stakeout

CRAWFORD COUNTY – As part of a deputy training program, we set up a mock violation with half the deputy force as violators and half as arresting officers. We decided to simulate poaching deer at night; everything from spotlighting to actually discharging a firearm (though not at a deer) took place. The most interesting thing about the mock violation is that not one phone call was placed to this officer, even though several people were in the area when the mock violation took place. Once again this proves how unwilling people are to get involved.—District Game Protector H. L. Harshaw, Conneaut Lake.



The Vandalizer

FOREST COUNTY – I recently trapped a bear and took it a short distance from the area. Unfortunately, it came right back to the Rourke farm and announced its return by crawling into a van truck and blowing the horn. The startled bear left quite a few paw prints throughout the van's interior on its way out. I reset the trap and caught the noisy intruder about half an hour later. This time I took it 135 miles away. That bear will probably need a roadmap for its return this time.—District Game Protector A. N. Pedder, Marienville.

The "Good" Life

MONROE COUNTY – When our summer residents are here on weekends, and some for a week or two, the wildlife complaints start. Most of the complaints will be that they saw a bear walk by their development or upset a neighbor's trash can. They will be so scared that it will attack them or their pets that they'll want it trapped and moved to another location. Or they'll see a strange animal that they are afraid of and will want it removed, too. If our present rate of development continues, wildlife will not have a chance in the Poconos. People come to the area, drain the swamps, clear the woods, build vacation homes and pollute the water. All this development destroys natural habitat for wildlife. Then the people want me to remove what wildlife is left, because they are scared of it. When will it end?—District Game Protector D. C. Beach, Cresco.

Cormorant and Crane

Each month, it seems you see something rare in the area. In June, during a walk in Buzzard Swamp in Forest County, we saw a double-crested cormorant and in the Shenango area of Mercer I saw a sandhill crane near the Dam.—Land Manager D. W. Gross, Chapmanville.

So There, Ornithologists!

BEAVER COUNTY – Deputy Sam Zinkham and his five-year-old son Joseph were at the Rochester Sportsmen Club Grounds. Joseph said to his father "Look, a red jay." His dad told him that it was not a red jay, but a cardinal. Joseph replied that if a blue bird was a blue jay then a red bird was a red jay.—District Game Protector G. T. Szilvasi, Midland.



Ask and Ye Shall Receive

A local landowner approached a hunter that was on his property and asked the man if he had permission to hunt. The hunter replied that he did not, because he didn't know the owner. The landowner politely asked him to leave which he did, but the hunter then found that his car was stuck. He asked the farmer to pull him out so that he could leave and the landowner complied. Later that afternoon, the same hunter came to the farm and asked permission to hunt on the land. The landowner told him to go ahead and hunt, and that he could come anytime. Just goes to show that all you have to do is stop and ask.—Land Manager J. R. Fagan, Allentown.

Where Flowers Are Found

CUMBERLAND COUNTY – During spring and early summer, I had the opportunity to photograph several of the "scarce" wildflower species, which I found growing in profusion throughout my district. Several of these flowers were found alongside busy highways, with the travelers apparently passing without a glance. It proves the old colloquialism that "a lot looks but not too many sees."—District Game Protector E. F. Utech, Boiling Springs.

Gone Beaver

LYCOMING COUNTY – Deputy Marks and I recently spoke with a landowner who complained of the mysterious disappearance of a beaver colony from his property. He felt the beavers had either been trapped without his permission or "kidnapped." His suspicions leaned towards the kidnapping idea, because his neighbor's pond had acquired some beavers just about the same time his disappeared. To the best of my knowledge, no ransom notes have been received yet.—District Game Protector W. L. Hutson, Williamsport.



Living Proof

ERIE COUNTY—When I answered a knock at the door, I found a local fellow standing there with a beer case under his arm. When he opened the lid, there sat a full-grown ruffed grouse. He said he had been walking in the woods when the grouse started to follow him. The bird trailed him all the way to his car. He said to himself, "There's no one here to see this, and everyone will say Ol' Pete's been drinking," so he reached down, picked up the bird and brought it in to show me. Then he returned it to where he had found it.—District Game Protector R. W. Meyer, Fairview.

Keep Your Seat

BRADFORD COUNTY – Most of our hunters are happy with our success at re-establishing the wild turkey population, but a note found tacked to a tree on Armenia Mountain, in an area where Game Biologist Arnie Hayden has a turkey study area, leads one to believe we haven't satisfied everyone. The note reads: "We got a bunch of crooket game cominers stole our turkeys and sold to other state. Kick that turkey man whereever you see him." Hey, Arnie, you better stay sitting!—District Game Protector W. A. Bower, Troy.

The Pressure's On

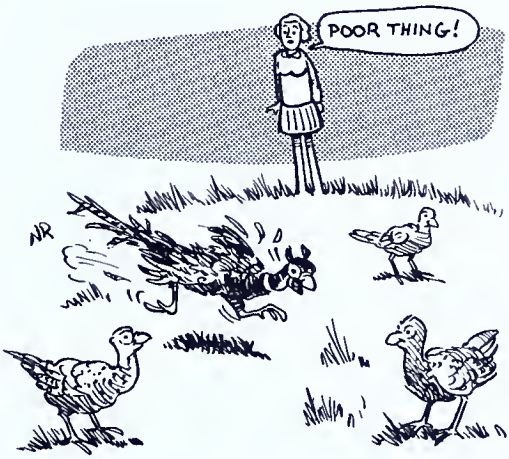
SCHUYLKILL COUNTY—Nothing really happened this month, except the number of road-killed deer was up, five times as many people had rabbit damage in their yards, I harvested my first spring gobbler, something ate my peas, several bear roamed through the district, I had a bear damage claim to investigate, someone found six baby opossums in the woods next to their dead mother (and do I want them), Deputy Joe Frantz is trying to trap a three-eared rabbit in St. Clair, etc. I just finished adding all this up, and it comes out to about ten days of vacation starting next week.—District Game Protector C. J. Harris, Pine Grove.

Encouraging News

I have seen more bluebirds this year than I have in the last several years put together. Perhaps they are making a comeback from the effects of DDT—now banned across the nation. I've seen a total of four pairs and three singles so far.—Land Manager J. A. Booth, Trucksville.

Primed for B'ar

HUNTINGDON COUNTY – Deputy Tom Wilson received a phone call around 1:30 a.m. The caller said he was going to shoot a bear if someone didn't come right away. Deputy Wilson jumped into his uniform and went to take care of the bear, which supposedly was working over the caller's dogs. When Tom arrived on the scene, he found the caller armed to the teeth and ready to do war on the bear. He said, "Them dogs of mine must have 'im treed for all the barking they're doing." Well, the dogs had 'im cornered all right. Except he wasn't a bear—just a large porcupine, and sure enough, the dogs had received the worst of it.—District Game Protector E. N. Gallew, Alexandria.



Help!

MONTGOMERY COUNTY – One woman was quite concerned about a male pheasant she had been watching. This particular male had a very large harem of hens and appeared to be wearing himself out strutting in several locations. The woman called to see if we could give him some reinforcement by stocking more males in the area.—District Game Protector B. J. Schmader, Collegeville.

They're Ubiquitous

Once during deer season, a hunter said to me, "Everywhere I look there's a Game Protector." I really didn't think too much about that until last month when I took my family to Florida. Wouldn't you know it—there in the midst of thousands of people at Disney World, was good old Game Protector Askey fresh out of the Country Bear Jamboree. I could hardly believe all the sunburn and smiles—Ron, that's just not your image!—Land Manager R. B. Belding, Baden.



Reluctant Cook

ERIE COUNTY — State Trooper Carlson and his hunting party arrived at their camp after a three-hour drive, eager for their spring turkey hunt. When unpacking their gear, one member of the group was quite disappointed to find that he'd forgotten his 16-ga. ammunition. Since no one else had any 16-ga. shells, he spent his visit at camp as a very frustrated cook. To add insult to injury, when the hunter arrived home he found a box of 16-ga. shotgun shells, packed separately, sitting on the floor in back of the car's front seat.—District Game Protector A. C. Martin, Erie.

Beyond the Call of Duty

DAUPHIN COUNTY — It irritates me to hear some sportsmen run down our deputy game protectors. In a recent court case, one of my deputies appeared as a witness several times against a man who had shot four pheasants in closed season. The violator and two other men also held a gun on my deputy—and another deputy also on the scene—and repeatedly threatened their lives. What did my deputy get out of this? Five hundred dollars in lost salary from his regular job, for which there will be no reimbursement. That seems to me to be much more than "lip service conservation."—District Game Protector J. Schweitzer, Hummelstown.

The Rumors Flew

SOMERSET COUNTY — My recent illness and stay in the hospital seems to have stirred up the imaginations of a number of people. According to some of the tales that have filtered back to me, I had been set upon by five of the local citizens (who are now heroes in their crowd) and severely trounced. After I had been home about three days, I got a phone call one morning. When I answered, a woman—in a somewhat shocked tone of voice—said to her husband, "It's him." He took the phone and said, "Ron, I thought I would call to see if you were off the critical list yet." Then, with concern in his voice, he asked if it was true that I had been shot in the stomach. That was the hottest rumor in this area for quite a while. What topped off the whole thing was that while I was in the hospital, supposedly with pneumonia, a man I had once arrested and for whom I presently hold a warrant, sent me a large vase of flowers—with five beautiful roses topped with a small ringneck. I'm not sure of his motives! Might say I *did* have a lung infection. And I still have the warrant!—District Game Protector R. J. Askey, Somerset.

CONSERVATION NEWS

By Ted Godshall

Hunting Seasons and Bag Limits Established

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ENLARGEMENT of the central Pennsylvania area for fall turkey hunting, establishment of a longer muzzleloader deer season, and a new trapping season for five wildlife species highlight the 1975-76 hunting seasons and bag limits set in June by the Pennsylvania Game Commission.

This year's regular four-week archery deer season will open on Saturday, September 27; the early small game season will start on Saturday, October 11; and the five-week general small game season will begin on Saturday, October 25.

A one-day bear season will be held on Monday, November 24. The regular two-week antlered deer season will open on Monday, December 1; a two-day antlerless deer season will be held on Monday and Tuesday, December 15 and 16; and the winter small game and archery deer seasons will begin on December 26 and close on January 17, 1976.

Expansion of the self-sustaining wild turkey range in the state led to a revision of harvest management areas. Previously, the northcentral part of the state had a fall turkey hunting season one or two weeks longer than the remainder of the state. To provide maximum hunting recreation and avoid the danger of disease from over-density of wild turkey populations, a five-week season was established for the southcentral Pennsylvania area, as well as the northcentral section.

The southcentral area open for the longer turkey season includes Bedford, Blair, Centre, Fulton, Huntingdon, Juniata, Mifflin, Perry and Snyder Counties, nearly all of Clearfield County, eastern Cambria and Somerset Counties and western Cumberland and Franklin Counties.

The northcentral area open for the longer turkey season was changed



ARCHER JERRY KOSSAR, of Mars, Butler Co., harvested this fine Allegheny Co. buck last season. Deer weighed 190 pounds and had an 11-point rack.

slightly, with the line being moved farther west in Warren, Forest, Venango, Northumberland and Luzerne Counties and farther north in Columbia County. Montour County has been eliminated from the seetion for the longer season.

During the new license year there will be a trapping season on skunks, opossums, raccoons, foxes and weasels, running from November 27 through February 28. Increased prices for nearly all furs have led to additional trapping activities in recent years, and the new trapping season is designed to provide additional controls over harvests, to better utilize the resources, and to ease any potential conflicts which might arise between trappers and those who pursue the species with dogs.

In addition, a separate hunting season was established for raccoons. The raccoon hunting season will open on October 25 and close on February 28.

The muzzleloader deer season, which was inaugurated last year in Pennsylvania, was quite successful, and will be lengthened during the new license year. There will be five days set aside for the muzzleloader hunters, the two days following Christmas and the Thursday, Friday and Saturday of the following week.

There will be 421,300 antlerless deer licenses available this year, compared to 389,650 in 1974. The increase is necessary to keep the whitetail herd in line with the amount of overwintering food available.

Basically, other seasons and bag limits are pretty much in line with those of the past year.

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Pennsylvania Seasons and Bag Limits 1975-1976

The Pennsylvania Game Commission, in Harrisburg on June 4, 1975, established the following seasons and bag limits for resident game and furbearers for the 1975-1976 hunting license year which begins September 1.

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 25 will be 9:00 a.m., D.S.T. Shooting hours for other days and seasons will be from one-half hour before sunrise until sunset except turkey gobblers (spring season) from one-half hour before sunrise until 11:00 a.m., D.S.T., and raccoons which may be hunted any hour except during the firearms deer seasons when the hours are from sunset to sunrise. Seasons and shooting hours for migratory birds will be announced later.

Daily Limit	*Field Possession Limit*	SMALL GAME	DATES OF OPEN SEASONS *First Day* — *Last Day*
6	12	Squirrels, Gray, Black and Fox (combined)	Oct. 11 .... Nov. 29 AND Dec. 26 .... Jan. 17, 1976
2	4	Ruffed Grouse	Oct. 11 .... Nov. 29 AND Dec. 26 .... Jan. 17, 1976
4	8	Rabbits, Cottontail	Oct. 25 .... Nov. 29 AND Dec. 26 .... Jan. 17, 1976
2	4	Ring-necked Pheasants, males only (except in designated area)*	Oct. 25 .... Nov. 29
		—both sexes in designated area*	Dec. 26 .... Jan. 17, 1976
4	8	Bobwhite Quail	Oct. 25 .... Nov. 29
Unlimited		Raccoons (Hunting)§	Oct. 25 .... Feb. 28, 1976
Unlimited		Woodchucks (groundhogs)	Closed Nov. 30 to June 13, 1976; Open Rest of Year
Unlimited		Squirrels, Red§	Closed Oct. 1-10
Daily Limit	*Season Limit*		
1	1	Wild Turkey—Northcentral and Southcentral Areas**	Oct. 25 .... Nov. 29 (Except Nov. 24)
		—Peripheral Areas	Oct. 25 .... Nov. 22
1	1	—Spring Gobbler Season (bearded birds only)	May 1 ..... May 22, 1976
2	4	Hares (Snowshoe Rabbits) or Varying Hares	Dec. 26 .... Dec. 27 AND Jan. 1, 1976 .. Jan. 3, 1976
		NON-GAME	
Unlimited		Crows	Jan. 19, 1976-Apr. 14, 1976 AND Jul. 1, 1976 .. Aug. 7, 1976
		BIG GAME	
1	1	Bear, over 1 year old, by individual or by hunting party of two or more	Nov. 24 ... Nov. 24
		Deer, Archery Season, any deer—Statewide	Sept. 27 .... Oct. 24 AND Dec. 26 .... Jan. 17, 1976
		Deer, Antlered, with 2 or more points to an antler or a spike 3 or more inches long	Dec. 1 .... Dec. 13
1	1	Deer, Antlered, and Antlerless with required antlerless license, buckshot only in Special Regulations Area listed below***	Dec. 1 .... Dec. 13
		Deer, Antlerless—Statewide	Dec. 15 .... Dec. 16
		Bad weather or inadequate harvest extension —Counties, and parts of, listed below****	Dec. 20 / Dec. 15 .... Dec. 20
		Deer, Antlered and Antlerless—with specified muzzleloader on designated State Game Lands*****	Dec. 26 .... Dec. 27 AND Jan. 1 ..... Jan. 3, 1976
		FURBEARERS	
Unlimited		Skunks, Opossums, Raccoons, Foxes, Weasels§ (traps)	Nov. 27 .... Feb. 28, 1976
Unlimited		Minks§	Nov. 27 .... Jan. 17, 1976
Unlimited		Muskrats (traps only)	Nov. 27 .... Jan. 17, 1976
3	3	Beavers (traps only)	Feb. 14 .... Mar. 14, 1976

NO OPEN SEASON—Cub Bears, Elk, Otters, Hungarian Partridges, Sharp-tailed Grouse, Bobcat or Wildcat. NO CLOSE SEASON—Chukar Partridges.

SPECIAL REGULATIONS

§No hunting for any wild bird or wild animal except deer and waterfowl during the firearms seasons for deer (muzzleloader season excepted). Raccoons may be hunted between sunset and sunrise during the firearms seasons for deer.

**Designated Area for Male and Female Pheasants*—North of Interstate Route 80 from the

Ohio line to the junction of Route 220. Thence north of Route 220 to the junction of Route 118. Thence north of Routes 118 and 415 to the junction of Route 309. Thence north and east of Route 309 to the junction of Interstate Route 80. Thence north of Interstate Route 80 to the New Jersey Line.

****** *Wild Turkey Season Oct. 25 to Nov. 29 (except closed Nov. 24)* in the northcentral and southcentral turkey ranges in the Counties of Bedford, Blair, Cameron, Centre, Clinton, Elk, Forest, Fulton, Huntingdon, Juniata, McKean, Mifflin, Perry, Potter, Snyder, Sullivan, Tioga, Union, and in that part of Warren County east of Route 62 north of Warren, south of Route 6 between Warren and Youngsville, and east of Route 27 between Youngsville and the Venango County line, that part of Venango County east of Route 27 between the Warren County line and Route 227, east of Route 227 between Route 27 and Rouseville, east of Route 8 between Rouseville and Franklin, and north of Route 322 between Franklin and the Clarion County line, those parts of Clarion and Jefferson Counties north of Route 322, those parts of Clearfield County north of Route 322 between the Jefferson County line and Route 219 and east of Route 219 between Route 322 and the Cambria County line, those parts of Cambria and Somerset Counties east of Route 219, that part of Bradford County west of the North Branch of the Susquehanna River, that part of Wyoming County west of the North Branch of the Susquehanna River between the Bradford County line and Route 309 and west of Route 309 between Tunkhannock and the Luzerne County line, that part of Luzerne County west of Route 309 between the Wyoming County line and Dallas, north of Route 415 between Dallas and Route 118, and north of Route 118 between Route 415 and the Columbia County line, that part of Columbia County north of Route 118, that part of Lycoming County north of Route 118 between the Columbia County line and Hughesville, north of Route 220 between Hughesville and Route 147, and west of Route 147 between Route 220 and the Northumberland County line, that part of Northumberland County west of Route 147 north of Interstate Route 80 and north of Interstate Route 80 west of Route 147, and those parts of Cumberland and Franklin Counties west of Interstate Route 81.

******* *Special Regulations Area*—Only buckshot and bow and arrow may be used for taking deer. The use or possession of single projectile ammunition (except arrows) or the use or possession of rifles or handguns while hunting or trapping at any time is prohibited in that part of southeastern Pennsylvania bounded by the following: Beginning at Washington Crossing on the Delaware River, west on Route 532 to Legislative Route 09034 (Bristol Road), north on Legislative Route 09034 to Route 611 (Easton Road) at Warrington, south on Route 611 to Legislative Route 09033 (County Line Road), north on Legislative Route 09033 to Route 309 at Line Lexington, north on Route 309 to its junction with Route 113, southwest on Route 113 to the Schuylkill River, northwest along the Schuylkill River to Route 100 (South of Pottstown), and south on Route 100 to the Pennsylvania Line. Hunting deer with firearms is prohibited in Philadelphia County.

******** *Antlerless Deer Season—Dec. 15 to Dec. 20* in the Counties of Chester, Delaware and Montgomery, and in that part of Berks County south of Route 22, and that part of Bucks County within the Special Regulations (Buckshot) Area.

********* *State Game Lands and their locations by Counties for Muzzleloader Season:*

12—Bradford-Sullivan
13—Sullivan-Columbia
14—Cameron-Elk
25—Elk
26—Bedford-Blair-Cambria
30—McKean
33—Centre
35—Susquehanna
36—Bradford
37—Tioga
39—Venango
42—Cambria-Somerset-Westmoreland
44—Elk
50—Somerset
51—Fayette
54—Jefferson
57—Wyoming-Luzerne
58—Columbia
59—McKean-Potter
73—Bedford-Blair-Huntingdon
75—Lycoming
86—Warren
88—Juniata-Perry
89—Clinton
91—Lackawanna-Luzerne
100—Centre-Clearfield
104—Bedford-Somerset
106—Berks-Schuylkill
108—Cambria
110—Berks-Schuylkill
111—Fayette-Somerset
141—Carbon
143—Warren
180—Pike
210—Dauphin
211—Dauphin-Lebanon
235—Franklin

Game Commission Declares Two-Day Antlerless Deer Season — December 15 and 16

The Pennsylvania Game Commission, by resolution at its meeting on June 4 in Harrisburg, declared a two-day statewide open season on antlerless deer.

Hunters participating in the antlerless deer season must possess an antlerless deer license for the county in which they are hunting in addition to the regular hunting license. One antlerless deer license application will be issued with each license. Antlerless licenses are available from County Treasurers *BY MAIL ONLY. DO NOT MAIL APPLICATION TO PENNSYLVANIA GAME COMMISSION OR DEPARTMENT OF REVENUE, HARRISBURG.* See rules on reverse side of application form.

Only hunters who have not already harvested a white-tailed deer and who possess an antlerless license may legally harvest an antlerless deer. Antlerless deer are those animals with no visible antlers, regardless of sex.

In a specially designated area of southeastern Pennsylvania, the antlerless season extends from December 15 to December 20.

In the Special Regulations (Buckshot) Area, antlerless deer may be taken during the regular statewide buck season if the hunter possesses an antlerless deer license.

County antlerless license allocations are as follows:

ANTLERLESS DEER PERMIT ALLOCATIONS

County	*County Seat*	*No. of Licenses*	*County*	*County Seat*	*No. of Licenses*
Adams	Gettysburg	3950	Lackawanna	Scranton	5550
Allegheny	Pittsburgh	4150	Lancaster	Lancaster	3650
Armstrong	Kittanning	6100	Lawrence	New Castle	2400
Beaver	Beaver	3700	Lebanon	Lebanon	2650
Bedford	Bedford	9700	Lehigh	Allentown	1800
Berks	Reading	4600	Luzerne	Wilkes-Barre	9200
Blair	Hollidaysburg	5750	Lycoming	Williamsport	12,750
Bradford	Towanda	11,550	McKean	Smethport	14,200
Bucks	Doylestown	3100	Mercer	Mercer	3700
Butler	Butler	5500	Mifflin	Lewistown	5100
Cambria	Ebensburg	8850	Monroe	Stroudsburg	6900
Cameron	Emporium	5300	Montgomery	Norristown	3000
Carbon	Jim Thorpe	6700	Montour	Danville	1000
Centre	Bellefonte	11,350	Northampton	Easton	2600
Chester	West Chester	3250	Northumberland	Sunbury	3150
Clarion	Clarion	5750	Perry	New Bloomfield	6800
Clearfield	Clearfield	12,250	Philadelphia	Philadelphia	....
Clinton	Lock Haven	10,200	Pike	Milford	6650
Columbia	Bloomsburg	4500	Potter	Coudersport	15,200
Crawford	Meadville	6000	Schuylkill	Pottsville	9300
Cumberland	Carlisle	3250	Snyder	Laporte	6000
Dauphin	Harrisburg	3100	Somerset	Middleburg	2250
Delaware	Media	350	Sullivan	Somerset	8100
Elk	Ridgway	13,350	Susquehanna	Montrose	5500
Erie	Erie	6000	Tioga	Wellsboro	12,800
Fayette	Uniontown	4200	Union	Lewisburg	2600
Forest	Tionesta	6300	Venango	Franklin	7900
Franklin	Chambersburg	6300	Warren	Warren	12,900
Fulton	McConnellsburg	5200	Washington	Washington	5250
Greene	Waynesburg	3900	Wayne	Honesdale	8100
Huntingdon	Huntingdon	12,200	Westmoreland	Greensburg	7450
Indiana	Indiana	8800	Wyoming	Tunkhannock	4100
Jefferson	Brookville	8300	York	York	4550
Juniata	Mifflintown	4700			
				TOTAL	421,300

Goose Blind Applications To Be Accepted September 1



SAM MOORE, AGE 12, bagged this Canada goose at the Game Commission's controlled shooting area at Pymatuning last year. Sam is from Allison Park.

APPLICATIONS for hunting from goose blinds at the Pennsylvania Game Commission's two controlled hunting areas at Pymatuning and Middle Creek will be accepted from September 1 through September 20.

Sportsmen will be permitted to apply to only one of the two areas this year. If a hunter applies to both areas, he will not be eligible to hunt on either area.

A sportsman will be permitted only one hunting trip to a controlled goose shooting area this year. If he hunts geese on one area he will not be eligible to return to that facility as a hunter this year, and he will not be eligible to hunt on the other controlled goose shooting area in 1975.

There are 40 goose blinds at Pymatuning and about 25 at Middle Creek. The Game Commission will hold drawings to select blind holders for both controlled shooting areas.

A reservation will entitle an applicant to bring not more than three guests with him. Guests must be present to register.

There is provision to accommodate handicapped persons if they are successful applicants.

At Pymatuning, there will be four shooting days each week of the season, on Mondays, Wednesdays, Fridays and Saturdays. Shooting at Middle Creek will take place on Tuesdays, Thursdays and Saturdays.

Reservation requests must be made on official application forms. Forms for hunting geese at Pymatuning are on orange-colored paper stock, while those for goose hunting at Middle Creek are on yellow stock. Hunters should be sure to fill out the correct form, since a Middle Creek application cannot be used for Pymatuning or vice versa.

Applications for hunting from goose blinds at Pymatuning and Middle Creek are available from the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120; from any game protector; from the Pennsylvania Game Commission, Pymatuning Waterfowl Area, RD 1, Hartstown, Pa. 16131; or from the Pennsylvania Game Commission, Middle Creek Wildlife Management Area, RD 1, Newmanstown, Pa. 17073.

The applicant's 1975-76 hunting license number, including the letter, must be listed on the application. Applications must be postmarked September 1 through September 20; any postmarked earlier or later will be rejected.

Only successful applicants, as determined in the drawing, will be notified. Reservations are not transferable.

The successful applicant whose

name appears on the reservation must present the reservation in person at either the Pymatuning Waterfowl Area headquarters (registration building) located on Legislative Route 20006 between Hartstown and Linesville about four miles north of Hartstown, or at the Middle Creek Wildlife Management Area visitor's center located on Hopeland Road about two miles south of Kleinfeltersville.

Hunters should arrive at least one hour before shooting time to allow for the issuing of permits. All reservations for any one day will be valid only up to one-half hour before shooting time on the specified day.

A federal migratory bird hunting stamp (duck stamp) is required to hunt geese and ducks. 1975-76 hunting licenses and duck stamps must be presented at the check station.

Shooting hours for the controlled goose hunting areas at both Pymatuning and Middle Creek are from one-half hour before sunrise until noon prevailing time, except on October 25, when no hunting is permitted for any wild birds or wild animals in Pennsylvania before 9 a.m.

In addition to the goose shooting area, there are also three controlled duck shooting areas at Pymatuning. Fifty hunters can be accommodated at a time in each of these three areas, making it possible for 150 hunters to utilize the duck areas on shooting days.

Shooting days for the Pymatuning duck areas are also Mondays, Wednesdays, Fridays and Saturdays, and duck area shooting hours are the same as for the goose area.

The Pymatuning duck areas are controlled shooting sections, but there are no advance reservations. A drawing will be held each morning to determine the 150 hunters who will qualify for the day if more than that number shows up. Those using the duck areas must check in at the registration building.

Ducks may be taken by hunters using goose blinds at both Middle Creek and Pymatuning, within other existing federal and state waterfowl hunting regulations.

Only one goose may be taken per day in Crawford County, where the Pymatuning Waterfowl Area is located. There is also a limit of one goose daily at the Middle Creek Wildlife Management Area.

This will be the second year for controlled waterfowl hunting at Middle Creek. Controlled waterfowl hunting at the Pymatuning started in 1962.

GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9x12 inches on 11x14 heavy, coated paper, without the GAME NEWS logo. The set includes Ned's woodcock from the April 1974 issue; the woodchuck from July 1974; the doves from September 1972, and the buck and doe from the December 1971 issue. These prints are not available individually. The price is $3 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.



WOODLAND THOUGHTS

BY LOU HOFFMAN

Wildlife Education Specialist

Slicing off the Kittatinny, the broad-wing caught a thermal just right and was effortlessly lifted higher above the landscape. When satisfied with his altitude, he peeled away from the upward spiral and glided southward along the ridge, his instinctive goal the wintering grounds of countless raptors in the distant tropics of Central and South America. Like the asters along the fields and the walnuts whose leaves are beginning to fall, the broad-wing flight signals the coming of autumn, the close of another summer. It's natural to reap the "fruits" of this time, but the harvest is not always for the pot. Respect for the outdoors is cultivated by one's collection of experiences—experiences which act like mental seeds whose growth broadens the individual's appreciation for all things wild and free.

HAWK FLIGHTS are not the only forerunner of the fall, but they are, for me, one of the most interesting. These migratory jaunts are not unlike those of waterfowl or warblers, or even of the mule deer of the West and the caribou of the North. Living near Kittatinny Ridge makes it easy for me to be interested. And though the variety is not that great—to see a dozen different kinds makes an exceptional day—there is something about a hawk on the wing that makes me want to watch.

As humans we probably identify more with predators than with prey species, and the raptors, with their ability to stoop, soar and glide, are a special group. Hawk watching has special appeal. Maybe it's the surroundings. Soaking up the color and warmth of an Indian Summer's day is reason enough for being on a rocky outcropping, and the panorama below is more than ordinary. But it's the growing speck on the horizon that attracts me on this day. Describing what is special about a hawk is not easy. Maybe it's where he has been or where he is going. No, I think it's where he is. We share just a few moments together. Me on my back, fumbling with binoculars to get a better look, and him above, imperious vision sweeping the nearby terrain, needing nothing to improve his perception. He passes, and I envy his journey.

But humanizing can reduce wild creatures, and I don't want to do that by identifying with the hawk. Respect, though, demands more than a passive awareness of its being; there's nothing passive about a hawk.

As a group, birds of prey have completed more than one swing of the pendulum. Many primitive cultures, concerned with only life's essentials, respected them as God-like creatures. Their strength and cunning captured the minds of simple people. To them, like the rest of nature, hawks were considered divine.

As civilization advanced, warriors' banners and coats of arms depicted

the hawk, the eagle, and the falcon as emblems of virtue, honor and courage. But things changed.

Knowledge became power and our rationalized dominion of the land emerged. But control of the land became clouded with problems hidden like the foot of an iceberg.

Looking through an old GAME NEWS I came across this interesting clipping that bears upon these thoughts:

". . . but on every visit to the feeding station they noted a Coopers hawk parked in some tree where he could easily see the pheasants when they came to feed. And finally they scared him up from a fresh kill some seventy feet from the station. Proving too wary to allow them a shot, they set a trap, and in a few hours they had him—and sped him on his way to where all good Coopers hawks go . . ."

Mixed emotions are probably stirred by such a quote. But remember, hindsight is easy, and I wonder what people will say of our actions 40 years from now. These things should not be judgments of right or wrong, but simply facing the reality of days gone by. We became so fascinated with our control of nature we overlooked her total beauty. We still do that today.

The pendulum is swinging, though, and this time toward the positive end for birds of prey. Humans are finding values in the lives of other creatures that were overlooked in the past. Our respect grows deeper and, as our understanding increases, it is expressed more openly.

But what are we still missing, what are we *not* sharing?

I think back to a day last September near Waggoner's Gap. A small group of people had gathered to watch the flight. It was almost "quitting time" when an old man climbed the slope. He had a slight limp and a weathered look. His Woolrich shirt pegged him a hunter and his massive 7x50 binoculars had not given way to a newer, lighter model. For awhile I concentrated more on him than on the skies. He wasn't quick to announce an oncoming bird; he didn't need the recognition as do some. He didn't tally the birds on a pad like some; he wasn't in the counting contest. And he followed each bird, watching intently its form and grace. He had respect.



Photo by Leonard Lee Rue III

BROAD-WINGED HAWK is one of the earliest migrators moving south each fall, and thousands pass along the Kittatinny ridge enroute to warmer regions.

Then he turned and looked to the valley where a bulldozer was wreaking havoc on a fencerow. I watched closely, and he noticed my stares. He looked at me and shook his head. Meanwhile, the serious students of "the game" were debating whether a distant hawk was a red-tailed or a red-shouldered, unaware of the total picture.

Genuine respect for wild things, like that old man's, helps focus that picture and reflects our individual attitudes. Being concerned must encompass more than a few parts of the wildlife spectrum. When more of us recognize that fact, the forest will become more than just a collection of trees.

Chuck Hunting With the Lewises

By Susan M. Pajak



OUR TWO ESTEEMED columnists, Sue and Don, got together for a chuck hunt . . . and here are the results. Rifles are Ithaca LSA 55, left, and Ruger No. 1, both in 22-250 cal.

JUST AS A few folks out there sincerely believe all the contributors to the GAME NEWS reside in Harrisburg (really, they don't), there are others who think outdoor writers never talk to each other in morbid fear of having what one chances to say or do turn out to be the other's column in a future issue.

Nothing could be further from the truth, dear friends, so when the chuck hunting invitation from Don and Helen Lewis jingled over my telephone some time back it sure didn't take me long to pack it up and move it out.

If you don't mind, I'd like to tell you about it, and I hope you have the opportunity to do some woodchuck hunting this summer yourself.

In the living room of the Lewises' home I pleated and pinned my five foot-four frame to the edge of the chair, not knowing exactly what to say to a gun columnist of some distinction—me, so often the recipient of the Foot-In-Mouth award and at that time a raw beginner in the outdoor writing field. That I would call a cartridge a bullet or some other choice flub struck total fear along my backbone.

But the Lewises' splendid hospitality immediately eased my jitters and soon Don and I were taking turns punching out targets at 100 yards, running chronograph tests on cartridges (bullets?) and spinning bullets (or is it cartridges?).

Toward early evening the four of us—Frank came, too—climbed into Don's four-wheel-drive and rumbled over the Kittanning countryside in search of the elusive chuck. It was all Helen and I could do there in the back seat to hang onto the rifles as each bounce of the wheels repeatedly separated us girls from our seats.

Shortly, a more - than - obliging farmer allowed us to set up operations in one of his fresh-cut fields. An hombre 'chuck resided in a big den that was a sure menace to farm machinery, he told us. Scrunching along the edge of the field, Don and I got things squared away and began the waiting game. Beads of pure sweat popped out all over me.

. . . Daddy used to remind me now and again, or whenever I would stop long enough to really listen to him, that you can't beat a man at his own game . . . it's not that I'm out here tryin' to beat anyone, but that Don is an excellent chuck hunter and this is going to be my shot . . . if I miss . . . oh, Daddy, where are you now . .

"It's out!" whispered Helen, who had been watching the den through binoculars. I chambered the cartridge and made ready. I double checked the situation and then put

GIRLS, GUNS, & GAME...

the scope on the chuck that was now standing erect.

"Hold about two inches high," Don said softly.

I held two inches high. I held my breath. I fired. One shot. One chuck.

Thoroughly pleased with the result, we all walked the long field for a few pictures as well as to properly dispose of the carcass. Don was glad I got the chuck. The farmer was glad I got the chuck. And, boy, was Susan glad she got that chuck!

The hunt was over now and the oncoming dusk found us driving back to the house. As we turned into the path, Don paused to take in the rusty sunset and then remarked, "You know, this is going to be a good night to get some bats . . . "

Like I said in the beginning, the notion that writers never talk or visit with each other because . . .

Good luck on your chuck hunt!

Listen, Gail M. Ried, 69 Evergreen Road, Pottstown, Pa. 19464, needs a little help. She writes . . . "I have several bags of goose down from geese my dad got this season and want to use it for making some warm winter clothing, but need some pointers on stuffing methods so I don't end up with a room full of down floating around. Thanks for any help."

Believe it or not, I once worked with a bag of chicken feathers but I can't say you handle goose down the same way. Anyone know?

Books in Brief . . .

(Order from publisher, not from Game Commission)

The Accurate Rifle by Warren Page, **The Complete Waterfowler** by Grits Gresham, and **The Complete Book of Deer Hunting** by Byron Dalrymple were reviewed in GAME NEWS when published in hardcover. They're mentioned again because each is now available in a softcover edition as one of the Stoeger Sportsman's Library titles. Each is loaded with information about the title subject.

In the same group is **Cooking Over Coals** by Mel Marshall, a former newspaperman who has hunted, fished and cooked over much of this continent. It tells how to take the critter you've shot or caught—be it antelope, buffalo, caribou, muskrat, possum, freshwater-, saltwater- or shellfish—and cook it over those glowing, somehow magic, coals. Everybody cooks outside these days, and this book tells how it should be done.

Another paperback (in larger format) from Stoeger is Russell Tinsley's **Bow Hunter's Guide.** Tinsley, a Texan who has written hundreds of outdoor articles and several books, begins by telling the would-be archer how to choose the proper equipment, how to learn to shoot it, and how to hunt with it—big and small game, even fish.

Price on each of the above books is $5.95, from Stoeger Publishing Co., 55 Ruta Court, South Hackensack, N.J. 07606.

The World of the Woodlot, by Thomas D. Fegely, Dodd, Mead & Co., Inc., 79 Madison Ave., New York City 10016, 126 pp., $5.50. Tom Fegely, frequent GAME NEWS contributor and Coopersburg, Pa., teacher who specializes in environmental education, has put together a delightful book for younger readers. Concentrating on the small patches of woodland that remain from the vast forests that once covered the East, he shows how each woodlot is a home for many species of wildlife, how it provides areas for bird watching, nature study and hunting, and how each is a part—a very necessary part—of the total environment.

Canoe Tripping Is Catching On

By Les Rountree



MORE AND MORE OUTDOOR enthusiasts are turning to canoeing for enjoyable, economical recreation. It helps keep you in shape, too!

ECONOMY TRIPS are becoming more important to campers each year. The price of gasoline and, for that matter, just about everything else continues to soar. Doing the inexpensive thing has not only become economically wise but also stylish as well. Instead of bragging about how much their automobile cost, it's a sign of the times that people nowadays talk about "miles per gallon."

The increased use of hiking trails and the surge in backpacking gear sales is proof positive that cheaper forms of outdoor activities are in vogue. As I've said before in this column, it's probably a good thing for American waistlines that the energy crunch hit us when it did. As a nation we were becoming too fat and too lazy. If some exercise can be worked into our fun, so much the better. It's a painless route to better physical and mental health.

In addition to walking, there has been a tremendous interest in canoe camping. As with backpacking, the movement is supplied by people-power and no fossel fuel is used up. A pile of countryside can be seen when canoe tripping and Pennsylvania provides some of the finest waters in the world for this sort of outdoor fun. All of the gear used for other types of camping can be utilized in some way by the camping canoeist. This includes items for regular backpacking jaunts as well as car camping gear that ordinarily runs a bit heavier.

Most backpackers should not carry more than 40 pounds in their packs, and that means leaving a lot of goodies at home. This limits comfort and convenience to a degree. When

traveling via canoe a lot of equipment that would absolutely be forbidden to a hiker may be toted. For instance, a camping stove. A two-burner gas or propane stove can be easily stowed in the center of a two-man canoe (14- to 16-footer). These stoves usually weigh about 10 or 12 pounds. Much too much weight for the backpacker to even consider, but not much weight at all in a canoe. Extra pots and pans can also be carried. Considerably more food bulk can be toted, and that raises the possibilities of some outstanding gourmet meals prepared at river or lake side.

No matter how one camps, it's always better to limit the gear to essentials and a few "possibles," but with the canoe there is more leeway. Most canoes will easily carry two adults and a hundred pounds of additional gear. Utilizing today's lightweight equipment, that's a lot of luxury.

In recent years, a platoon of canoe manufacturers has hit the scene with all sorts of shapes and styles. As with all manufactured goods, some are good, others are bad, and some are just absolutely worthless. The shapes, styles and colors of certain canoes lend themselves beautifully to Pennsylvania waters, while others are special-purpose craft designed to do other things. Obviously, a single- or double-cockpit kayak is not the thing for canoe tripping. Nor are some of the tiny, one-man fishing canoes that barely offer enough room to change your mind. Long, skinny racing canoes are not camper canoes either. A camping canoe, to my mind, should be built from fairly light but durable material, offer a beam width that provides a measure of tipping insurance and feature enough flotation material or buoyant chambers to keep the canoe on top of the water even if it upsets. If you do not know much about canoes, get to know someone who does and tell him what you have in mind. The canoe that is perfect for the white-water enthusiast may not be your thing for floating, say, the Juniata, Delaware, the middle Allegheny or the Lehigh. But it might be just the ticket for upper Pine Creek during the spring runoffs.

Try to climb into as many canoes as you can before you make a purchase. In addition, rent a canoe or borrow one from a friend and try it before you lay down your money. Different canoes handle differently. Just like automobiles, one may suit you perfectly while another equally good one will not.

Try Smooth Water First

For your first attempt at paddling a canoe, choose a very still pond or river pool with little or no current. Don't attempt to hit fast moving water on your solo voyage. The velocity of river current can be misleading to an unpracticed eye. When shoving off, keep feet in the center of the canoe to avoid tipping. Even the most stable of canoes can be upset . . . no matter what the manufacturer says.

While considerable practice should be had with the partner who will accompany you on the first camping trip, preliminary paddling practice should be done alone. If you are going to go about this by yourself, be sure to have someone standing by on the shore. The best way, of course, is to have an instructor in the canoe with you.

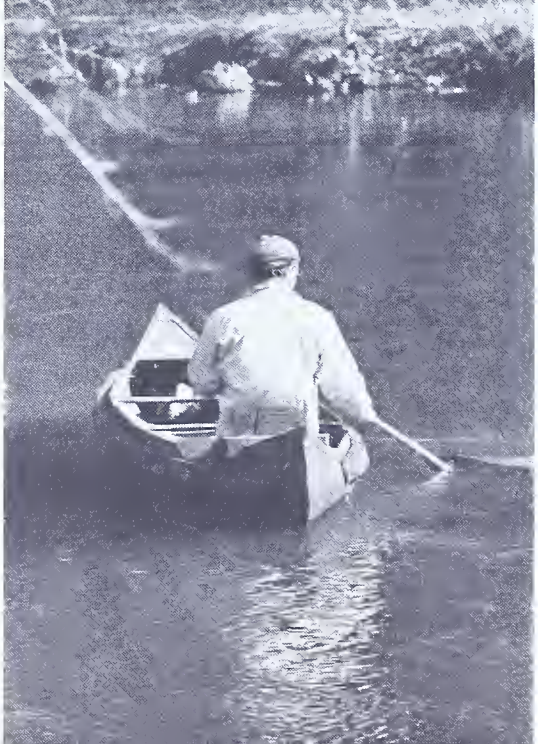
The canoist needs to know three basic strokes. The forward power stroke is just what the name suggests. Dip the paddle into the water, about two-thirds of a blade length (the flat part of the paddle), and draw toward you. When two paddlers from opposite ends and sides of the canoe do this simultaneously, it will move forward in a reasonably straight direction. When alone, the paddler must alternate sides . . . or learn the second stroke which is the "J." By twisting the paddle in the hands at the end of the stroke and making a J shape in the water, the canoe is at once

thrust forward and kept straight by that final twist of the paddle blade. Without the J movement at the end of the stroke, the canoe would go around in circles. The stern paddler can change direction by reaching far out to the side with the paddle blade parallel to the hull and drawing the blade toward his body. This will move the stern toward the paddle and the bow in the opposite direction. The bow paddler can do the same thing by reaching and drawing.

Once you master these three strokes, you're ready to tackle a mild river that offers a bit of current. Pick an easy stream for the first attempt and don't try to pull a "Burt Reynolds" on the first outing. Go with someone, preferably the person you'll be camping with, and learn to operate as a team. Utilizing the draw, power and J strokes, most canoeists can handle all but the more serious water. Save the big, boulder-strewn rapids for the day you're a real expert.

The basic rule for all canoeing in moving water is to keep the canoe in line with the current. I'll repeat that in different words—*always keep the canoe parallel to the movement of the water.* Failure to do this is the reason for most upsets. The other reason is standing up—or trying to stand up—in the canoe.

FOR YOUR INITIAL attempt at paddling a canoe, Rountree recommends a very still pond or river pool with little or no current for safety's sake.



Go with the current at all times. Never attempt to turn the canoe in fast or even moderately fast water unless the current turns. When water is fairly deep and an obstruction looms up in front of you, a boulder of wheelbarrow size, say, the natural cushion of water that flows around the rock will help you in avoiding it. Both paddlers can draw stroke on the same side and literally slide the canoe sideways. Any attempt to weave the canoe back and forth through a maze of boulders will usually end in disaster. Go with the current . . . make it work for you.

Practice First

All of the printed advice in the world isn't worth an hour of actual practice. In one hour most beginners will acquire a certain feel for what the current does to a canoe hull. Six hours of practice is usually all that's needed before you set out for a canoe camp adventure on a mild river. By all means wear a life jacket for your first moving water adventure and continue to wear one on every camping trip. We certainly don't need more unpleasant statistics.

Pack the gear in the center of the canoe in such a way that the canoe rides at a reasonably level attitude. For smooth lake traveling, a perfectly level canoe or one slightly higher at the bow is correct. For river work, level or slightly heavy in the bow, will be found to work better. A slightly bow-heavy canoe responds better in fast water. In downstream canoeing there will always be special situations that won't be covered in any canoe handbook, but one basic part of learning to "read the water" is the V-shaped current that leads from smooth water to fast water. If the open end of the V heads downstream, aim right for it. That will be the

deepest part of the connecting water. If the V heads upstream, that means an underwater obstruction of some sort and it's wise to head for one side of it.

If any piece of water looks like it might tax your capabilities as a paddler or "water reader," head for shore and walk the canoe around the questionable section. Don't try to be a hero just to prove something to yourself or to others. A dunking in a cold stream is not worth it and a mere dunking could be the least serious thing that might happen. A knowledgeable guide on the Little Southwest Miramachi River once told me that there are no "old dumb" canoe paddlers, just "old smart" canoe paddlers. He didn't explain what happened to the young dumb paddlers but we can all figure that one out.

Just about everything on a canoe camping venture will be wet at least six times during a week long trip. For this reason, it's a good idea to put everything into waterproof bags . . . especially the sleeping bag and the foodstuffs that are affected by moisture. Some of the big camping supply stores offer bags made especially for this purpose, but heavy duty garbage bags will do the job nicely. Tie the bags tightly with a short piece of rope and then tie the rope to one of the canoe thwarts (cross members). If you do upset, everything will stay attached to the canoe and won't drift while you are busy rescuing yourself.

Preplan any canoe camping trip and check on the state map to see if you are traveling through state or private land. A number of designated camping areas are located adjacent to canoeable rivers. A letter to the Department of the Environment will bring a list of them. On private land,





A CANOE CAN TAKE you to out-of-the-way areas for hunting, hiking, fishing, nature study. Store food and sleeping bags in waterproof containers.

always check out whose land you want to camp on and obtain permission. Make sure any fire you start is out before you paddle on and do police the area perfectly. As with backpacking, if you can carry the full containers and packages with you, it's certainly possible to carry the empty ones to the nearest trash can.

I can't imagine a more delightful camping adventure than one spent drifting along a Pennsylvania stream. The constantly changing scenery provides a much more relaxing scenario than charging down a highway wondering if you're on the right road. The rivers only go one way so you can't take a wrong turn. Each bend in the river may bring a duck, deer or painted turtle into view . . . there's something different to be seen every minute. Depending on how fast you want to travel, the exercise can be as spirited as you want to make it. On the quiet stretches, feet can be propped on the gunwale and contemplating the sky can be the order of the hour.

For a fine map of the waters of the Commonwealth, send $1.06 to the College of Agriculture, Box 6000, Pennsylvania State University, University Park, Pa. 16802 and ask for the Pennsylvania Stream Map. It shows all major (and most minor) water ways in the state and into which watersheds they fall.



TOP TALENT IN THE KEYSTONE Federation of Bowhunters: left to right are Larry Gallagher, president of Lenape Bowmen; Frank Hinnegan, Federation president; Basil Marcolina, Wapiti Archers president; and Bob Bennett, vice-president of the Federation. Missing from photo is Dave Swavely, Frontier Archers prexy.

Keystone Federation . . .

SOUTHEAST SAMARITANS

By Keith C. Schuyler
Photos from the Author

WHEN WE arrived at Lenape Bowmen field course at 11 a.m. on Sunday, January 26, this year, the 160th contestant had just registered for the regular Sunday shoot. And registration would remain open until 1 p.m.

This is simply to illustrate the activity which goes on week in and week out in the Keystone Federation of Bowhunters in southeast Pennsylvania.

"Oh, this is about average for a good day," Bob Bennett, Federation veepee and hard-working leader at Lenape, said, as he fashioned a ladder of award bars beneath a medal. He nodded to the busy snack bar and grinned. "We average about $1.50 a customer. Have a cup of coffee." (I'm on record as never having turned down a cup of coffee.)

In effect, the visit to Lenape Bowmen, Inc., was a continuation of a look at the southeast Pennsylvania group which began with coverage of a 3-D shoot held by member club Frontier Archery. (See "Focus on Frontier," in the January, 1968 GAME NEWS.)

The evening before the 1975 visit, Mrs. S. and I kept a date with Wapiti Club, at Fort Washington, which had been interrupted three years previously. My talk was rewarded with a steak dinner, coffee and otherwise, and a pleasant evening of dancing at the American Legion to mark the annual awards meeting. Basil Marcolina, president, was master of ceremonies for the event.

Aside from the fact that this alliance of archers is almost solely devoted to promoting the hunting sport, it has a reputation for lending its efforts to charitable purposes. The

May 31-June 1 Charity Shoot scheduled for this year marks the 16th such annual endeavor. Prior to the 1975 event, a total of some $55,000 had been raised for worthy causes.

Each year a committee reviews a submission of charitable needs and one is selected as recipient of proceeds from the special shoot. In addition, each of the Federation clubs contributes $50 from its treasury. Current benefactor is the Deborah Heart and Lung Center in New Jersey. Originally the shoot was a one-day affair, but its popularity necessitated an extra day to accommodate the more than 500 who usually participate.

Possibly the altruistic approach of the Federation is best summed up in one sentence from the 1973 program dedicated to the Deborah center on occasion of its 50th anniversary: "Through our support of Deborah's life-saving work we give expression to our belief that decent people with any surplus of energy and means fulfill a high purpose when they aid fellow human beings who need a helping hand, particularly in case of serious illness." These words came from Jack Lesser, president of the center, but their implication might be extended to each archer who supports the charity program.

There certainly must be a "surplus of energy" even though, typically, it is drawn off the busy schedules of a core of the more dedicated bowmen in each club.

Four clubs comprise the Keystone Federation, with three of them located in Montgomery County and the fourth in Philadelphia County. Originally, the federation was formed as a somewhat loose alliance among four clubs, Wapiti, Lower Providence, Wyn Glen, and Lenape. Three of the



COMBINATION INDOOR archery and pistol range at Lower Providence. Steel deflector can be raised or lowered automatically for either target sport.

four original clubs remain in the Federation; the Wyn Glen Club has been replaced by Frontier Archery Club. Wyn Glen still exists as the Feather Twangers, quartered as a hunting club at Forksville.

Although the federation became such in 1957, each of the organizations has a history prior to joining the group. As purely an archery club, possibly Frontier wears the whiskers, having been started in 1953. Present range is located south of Pottstown near the junctions of Routes 23 and 100. Lower Providence Rod and Gun Club was founded in 1949, although the archery section is a later addition. Lenape Bowmen, Inc., can trace its activity in archery back some 17 years at its location between White Marsh and Springfield townships, at Miquon, in the northwest extension of Philadelphia County. Wapiti Archers is located on Bethlehem Pike at Fort Washington.

Total membership of the four clubs is currently around the 660 mark. Frontier has by far the largest membership with 310, followed by Wapiti with 150. Lower Providence runs a close third with 120 members and Lenape has just over 80. Statistician for the federation is Herb Thamer





THESE PRACTICE BUTTS at Lower Providence are well-lighted for night shooting. The club also has an indoor range, as well as this field-type setup.

of the Wapiti Club, who has kept records on all four federation member clubs over a considerable period. Not only does he break figures down into the number from each club attending the various shoots, but he also lists those in the various classifications.

For example, since a Sunday shoot is held regardless of weather, he showed a low of 17 in December, 1973, most recent record available, and a high of 406 at the Frontier August 3-D shoot. Best total member attendance for the year was 1830 at Wapiti, an average of 152.5. Lenape, with the lowest number of club members, had second highest member participation for the year with 1818, an average of 151.5.

At a time when most archery clubs are having difficulty holding their membership, clubs in the Keystone Federation have shown healthy improvement. Difficulties are always inherent in any organization. However, when things are going well, it is only natural to seek out the reason for progress, even as we are perhaps too prone to try to pinpoint reasons for failure.

Possibly the one factor which stands out more than anything else in the four-club federation is that there are no bullseye targets to be found anywhere out of doors. Actually, the only exception to this rule is the indoor range at Lower Providence. All outdoor activities center around the needs of bow hunters. Targets are all animal faces except for the 3-D shoots which are a particular specialty of Frontier Archery Club.

One other facet which stands out to augment success of the federation is the dues structure. Whereas most archery organizations concentrate upon getting by with dues as low as possible, and in so doing threaten the very existence of their clubs, the federation puts a price on its activity. Regular dues for full members are $10 and 16 hours of work a year. Non-working members are billed for $35 annually or $40 for full family membership. Keep in mind that these clubs are increasing, both in participation and membership. Those who do not have a regular membership do not have access to clubhouses other than during the regular weekly shoots.

For a number of years the federation operated completely independent of the Pennsylvania State Archery Association. Five years ago each of the clubs individually took membership in the state organization so that their members could participate in state events if they individually affiliate. One qualification shoot is held each year so that all members who wish to shoot in state tournaments can become classified. This is necessary since the basic field course round is somewhat different than that shot by the state organization. In addition, federation field courses have 30 targets, and classification for the multi-club group has its own skill system based on this number of targets.

Classifications have little direct relevancy to those to which members of the PSAA have become accustomed, since scores are based on 30 targets with a perfect 600. Nevertheless, classifications are somewhat similar with masters, expert, bowman, archer, hunter freestyle, junior, novice and bantam classes. Shooting is not

confined to fair weather although, of course, there are times in winter when weather discourages attendance. Nevertheless, there is a shoot scheduled for each Sunday, alternating among the four clubs. Of the $2 charge for shooting, 15 cents is a head tax for the federation. Each club has 12 shoots. This leaves four Sundays free but these are special tournaments taken up with proceeds going to the federation or, as previously explained, to charity. Each club alternates entertaining archers on the fifth Sunday in any month which has more than four.

Clinics, Charity Shoots

In addition, free clinics, where all archers may participate, are held each year over a period of eight weeks. The Memorial Day weekend is usually the two-day charity shoot. Wapiti Club was scheduled to host the 1975 charity shoot on May 31-June 1.

Although the federation is admittedly interested primarily in its own activities, it was a group from the organization that set up the field course for the 25th World Archery Tournament held at Valley Forge. It was a tremendous undertaking. In addition, the various clubs hosted many of the archers from other nations who were on their own to find a place to practice before the main events.

Because of the proximity of the four clubs and the unbroken schedule of Sunday shoots, certain advantages accrue that are not practical in the more loosely knit conferences of the PSAA. For example, no scores nor trophies are given out on the day of a shoot. Rather, they are presented at the following week's shoot.

This procedure eliminates the possibility of instant error with its attendant complications and possible hard feelings. As with many archery clubs, the federation is moving more toward medals and bar attachments for awards. Trophies are still popular with the younger archers, but some of the more expert find that trophies take up too much space in the home and lose their significance. Many have been donated back to the clubs.

Since Frontier Archery Club was the subject of a previous column, it will suffice here to mention that it still has two of the biggest archery events, attendance-wise, in the state—the 3-D Animal Shoots. In 1973, there were 330 in attendance at the August shoot and 406 at the September event. These two shoots alone, which draw archers from over a wide area, largely finance annual activities. Frontier is host club the third Sunday of each month.

For a closer look at the Wapiti Archers' facilities, my wife and I went with President Basil Marcolina and Secretary Dale Berger. To get the feel of the course, I wiped the cobwebs from one of my hunting bows and joined Basil and Dale in an attack upon some of the interesting animal targets after a visit to the clubhouse.

Typical of all courses in the federation, distances are unmarked. Each of the butts is well-constructed and backed by addition of wall board to catch errant arrows. Several strongly constructed elevated platforms provide a variety of shooting situations such as may be encountered on the

TEST SHOT ON ONE of the life-like, three-dimensional targets at the Frontier Club. Practice on these figures increases skill for the archery deer season.



average hunt. Wapiti is host on the first Sunday of each month.

At Lenape, Bob Bennett and President Larry Gallagher took time to fill in information on this city-side organization which utilizes a miniature wilderness hidden from the main highways. Broken terrain in itself makes it possible for all types of natural shots from any angle up- or downhill. Popularity of the field course was evidenced by the large number in attendance despite the heavy rain of the previous day which again threatened.

One of the features at the clubhouse is a three-dimentional ape which serves as an ornament and an object on which to vent verbal frustration after a bad round. Because of the usually large attendance, it is necessary to utilize an additional parking lot a few hundred feet from the clubhouse. Shoots here are the fourth Sunday of each month.

Gunners, Archers Compatible

Following our visit to Lenape, we were turned over to the federation's amiable president, Frank Hinnigan, who guided us to Lower Providence Rod and Gun Club. Here is one of the finest evidences that gunners and archers can be completely compatible. Although started as an organization for fishermen and gun hunters, the addition of an archery section augmented the membership and total activities, rather than in any way disrupting the normal programs.

An example of the cooperation among members with divergent interests was shown on our arrival. Several pistol shooters were utilizing the indoor range which serves both gunners and archers. They readily relinquished their time so that we could get a photo of the range.

Conversion from guns to bows is accomplished in seconds through an ingenious arrangement of electric power which lowers the bullet shield. The metal shield, which permits firing of up to 38-caliber ammunition, is mounted so that deflecting bullets do not damage the archery butts.

In addition to a fine field course, a practice range with shots up to 50 yards is located just adjacent to the clubhouse. It is replete with various size animal targets and a running deer which is mechanically operated. The area is lighted for night shooting.

Granted, the four clubs of the Federation are located in a semi-rural area of considerable population to draw upon. But it takes something more than just people to succeed in any endeavor. That something is quite in evidence in the southeast corner of Pennsylvania. A sizable number of champion archers have developed in the area; the number of deer taken by active hunting members is considerably above the average. Rules are strictly enforced to insure that each archer can be comfortable among his or her peers, and the example starts at the top.

As evidence that Keystone members take their archery seriously, here are some of the winners from the four clubs at the state tournament held in Seven Springs in 1974: Bare-bow women: A Class, Margaret Carol Bennett, 1st place; B Class, Josie Holland, 2nd place; C Class, Joan Bydzynski, 2nd. Women's Freestyle: A Class, Vonda Kemmerer, 2nd; B Class, Nancy Heck, 1st. Bow hunters: A Class, Andy Anderson, 1st; Ed John, 2nd; B Class, Dom Conicelli, 1st; C Class, Bill Watson, 1st, and Joe Loss, 2nd. Bare-bow men: B Class, Matt Rydzynski, 1st.

At the Valley Forge State Target Shoot: Leslie Watson, took 2nd place among intermediate girls; Tom Stevenson, Jr., scored 2nd place among junior boys; and Dawn Higginson took 1st place among junior girls.

As bow hunting approaches, it is a fair bet that another generally successful 1975-1976 season will be enjoyed by the Samaritans from the Southeast. They have put a purpose into their practice whether it is self help or to help others.

Reloading the Rifle Cartridge

By Don Lewis

Photos by Helen Lewis

UNFORTUNATELY, much of my mail from GAME NEWS readers waits in an ever-growing pile to get answered when time is available. As much as I appreciate the letters, only a few get personal replies, but many of the questions asked see column space. In fact, this column is dedicated to the dozens of readers who have asked for help in the field of rifle cartridge loading. My aim is not so much to do extensive evaluation of reloading equipment, but to give a breakdown of really how to get started properly.

I can't think of another handloader who was more confused about reloading than I was two decades ago. A good bit of material was available in shooting mags, but much of it was vague. I was caught by doubts of my own ability and a certain amount of fear. On top of this, a number of people I contacted with the hope of gaining some insight magnified my doubts and fears. One stern elderly gunsmith laid a firm hand on my shoulder and sadly shook his head at the very thought of Don Lewis becoming a handloader. His advice was blunt and to the point: "Stay as far away as possible, friend, it's only for firearm experts and gunsmiths."

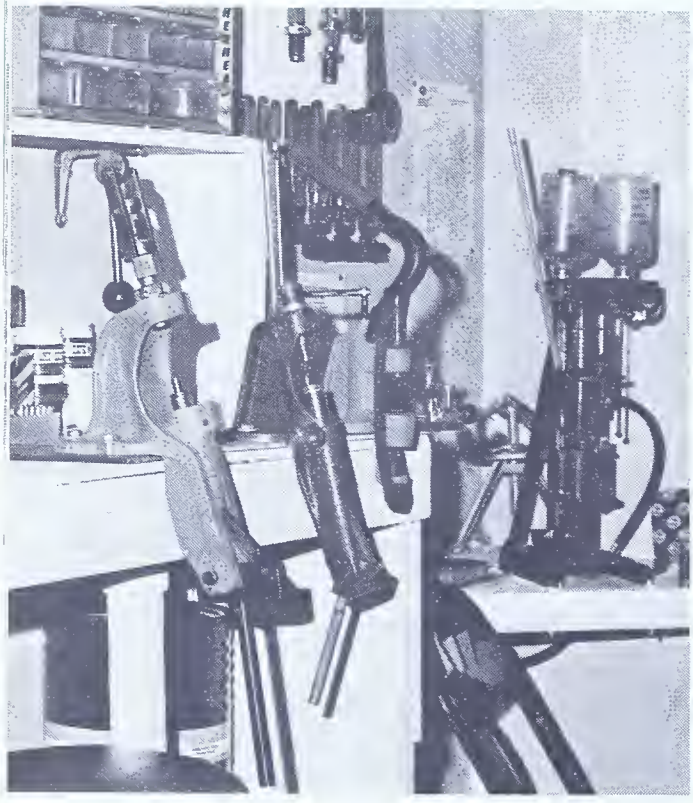
For several years in the early 1950s, I believed this hokum and as a result nearly missed becoming involved in a fascinating aspect of shooting—making home fodder. When it dawned on me that some of these handloading "experts" didn't have a lot more savvy than I had, I tossed their advice to the wind and got out catalogs. I must admit I had grave reservations about the whole matter, but vowed to myself I would learn or go down in humiliating defeat.

I spent hours devouring anything written on handloading, but to be truthful, it just seemed to make matters worse. Almost every writer seemed to be a top expert and put handloading in a category above the reach of a simple chuck hunter like me. While waiting for the equipment to arrive, there were times I wished I had saved the money for something else.



PRIMER-SEATING DEVICE is used in one operation that goes into preparing a handload. Implement is quite safe when used properly.

Today, it seems impossible I ever harbored that type of thinking. I'm not saying that handloading is to be taken lightly, but I do think some of its technical aspects are often blown out of proportion. When you come right down to bare facts, handloading



NOTE THE COMPACT reloading setup here. From left to right are Bair, C & H, Lyman and MEC outfits. MEC loader is a shotshell press.

is nothing more than some simple mechanical operations carried out with the judicious use of caution and common sense.

It could be I oversimplify it, but assembling a rifle cartridge basically requires only installing a primer, powder charge and bullet. I'm not overlooking the fact the old primer must be removed and the case resized. But, for the most part, this is done by forcing the empty case into a resizing and decapping die. There should be little or no problem selecting a proper bullet/load combination since numerous good loading manuals list hundreds for all common cartridges and calibers.

I still recall with some apprehension the first cartridge to come from my press. I suppose I checked every move several times, and I'm positive I weighed the powder charge three times. I was so uncertain about seating the bullet, I used a sized unprimed case to set the seating depth. After settling that score, I got up the nerve to go for broke and use live components. It was as easy as skimming icing from a cake when the wife isn't looking. In fact, with every round my confidence grew, and from the start I shot good groups with my own loads.

I've loaded too many thousands of rounds to imply handloading can't be technical and that it does not need the utmost attention from the handloader. I've done test work that required filling the case with water and weighing the water to determine case capacity, I've checked the uniformity of flashhole diameters, and I've weighed every bullet and run bullets through a spinner to check for concentricity and squareness of base. These things, along with case trimming, neck reaming and holding powder charges to almost a kernel of powder show that some technical steps can be involved. But most of these are not needed to turn out a good hunting round.

As I said, this article is not to explore the technical ramifications of handloading, but to prove to the average hunter and shooter that handloading is rewarding and really well within the financial reach of any hunter or shooter who would like to get away from store-bought ammo. The price of a new big game rifle or repeating shotgun will easily set up a complete loading outfit.

One of the hurdles of becoming a handloader is just getting started. Buying the equipment is important, but building a loading bench should receive more than just a casual consideration. Over the years, my shop has spread out through several rooms,



but really a lot of space is not necessary. I've seen some very fine setups in apartments, basements, and even small dens. One man had a press mounted on a plate that was welded to a support post in his basement. A locked cabinet on the wall held his other gear and components.

If space is not a problem, a loading bench should be about two feet wide and five feet long, with a foot-wide shelf 14 inches above the bench. This makes a very convenient setup and allows ample working room. The height of the bench is a matter of personal choice, depending on whether the handloader wants to stand or sit. I prefer standing, as it's much easier to full length resize from that position. I find that 38 inches is a good height for me.

More important than anything else is making the bench strong. One that wobbles or springs is useless. A heavy frame covered with two inch planks with a strong post directly under the press will give adequate support for full length resizing or even bullet swaging. I also like to bolt the press on a ⅜" steel plate for added support.

I'll not get involved any further in the design of the loading bench, for most any type will suffice. I do like mine painted and normally cover the planks with heavy plywood. Enamel paint makes a smooth, clean working surface. The nicest outfit I've seen was made from full-grained wood in a small apartment. It was a foot-deep closet with two doors. When opened, an adjustable leg gave support to the floor and a full reloading setup was ready for use. It didn't have the strength of a floor model, but it did the job and really enhanced the owner's den.

I've learned over the years the main concern of many shooters with a yen to reload is an inherent fear of making a mistake. For instance, I've been told on a number of occasions about the fear of storing a can of powder. Well, here again, common sense must be used. A can of powder, if handled properly, constitutes no more danger than a box of matches or a can of pesticide. Select a dry, cool storage area and keep powder and primers in a locked cabinet. Contrary to popular belief, powder does not deteriorate quickly. I have used powder that was more than 10 years old.

So far as having an accident when reloading, the probability is remote. During more than two decades of assembling my own ammo, I have had one primer detonate when I accidentally crushed it against the shell head. Other than a small report and some smoke, no damage was done. I'm inclined to say there's nothing to fear from reloading. I think it's easier to get into trouble with a power hand saw or a power lawn mower. I try to use sound judgment when involved with any activity where an element of danger is present.



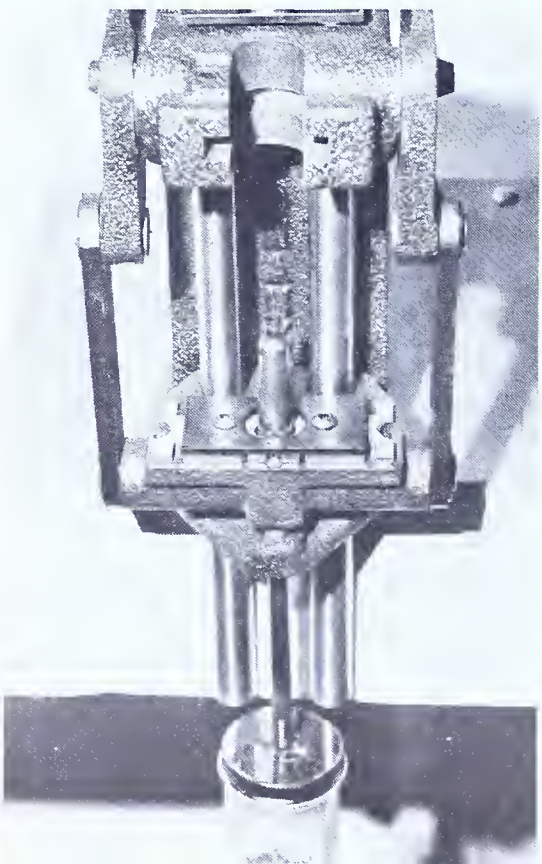
AT TIMES, HANDLOADING can become technical. Lewis insists, though, that the average hunter or shooter can easily master the operation.

After I made up my mind to become a handloader, it took three weeks of intensive study to select the equipment. The more I pored over the catalogs, the more confused I

became. Each manufacturer put his best foot forward with impressive claims that made his equipment the very best. I was lost among single stage, double stage and turret type presses. The C type, toggle type, upstroke or downstroke all added to my woes. It's very easy for me to understand the dilemma the prospective handloader faces. Perhaps I can offer a little advice to make the job easier.

First, start with just the basic tools and one or two die sets. Start small and work up is the best motto. Fortunately, some firms such as Bair, Lee Precision, Inc., and RCBS are offering kits. I saw one in the 66th edition of Stoeger's *Shooter's Bible* called the Hunter's Special. It consisted of a Black Bair press and shellholder, a set of Bair scales, one set of dies, chamfering tool, case lubricant and powder funnel, plus a Speer loading manual, all for a good bit less than a hundred dollars. Other firms offer similar setups, but my point is that a kit such as this is enough to start any new handloader on a lifetime of pure enjoyment and a considerable financial saving.

BONANZA CO-AX PRESS showing shell holder and primer catcher. Shell holder is opened automatically when handle is pushed to the rear.



Another relatively new press that has some remarkable features is the Bonanza Co-Ax. Any handloader with a single die press knows the time spent changing dies. I'm sure the "snap in—snap out" die change offer by the Co-Ax would surely be appreciated. It doesn't take more than three seconds to change dies. Any standard ⅞x14 thread die set can be used, but I would suggest removing the original die lock ring from each die and replacing it with the Bonanza cross bolt lock ring since it's larger and fits the press die holding slot tighter. The cost of the cross bolt lock ring is around a doller each.

This new outfit has impressed me quite a bit, especially with its universal self-acting shellholder. I can't recall how many times I've had a case stick in a shellholder, and prior to cutting a primer slot, it was impossible to insert a case that had a protruding spent primer. The Co-Ax's shellholder opens automatically when the handle is pushed to the rear. The shellholder jaws close around the shell head as the press handle is brought forward to align the case with the die. Three sets of jaws give total coverage of all cases, and the No. 50 set in my press will accept all rifle cartridges from the 222 to the belted Magnums.

Another important feature is the unique priming device that guarantees a perfect primer seat to the correct depth below the shell head. This is important as it prevents any danger of a premature explosion by closing the bolt on a protruding primer. I found it impossible to crush a primer because the press handle has reached its maximum swing when the primer is seated.

I would not suggest using the Co-Ax for bullet swaging even though it's a strong press. I use a Grizzly Bair C type for the extra heavy duty work



CHUCK HUNTERS, OR OTHER shooters who use a lot of ammo, can benefit from reloading. Also, it's satisfying to be able to score with one of your own loads.

and would highly recommend it, the C & H Champion or the RCBS Rock Chucker if bullet swaging is going to be a major part of the reloading game. I admit the average handloader probably won't become involved with bullet swaging, but the new C & H swaging dies now on the market should make a lot of handgunners take a second look at the three-quarter jacketed bullet.

For simplicity at its finest, Lee Precision, Inc., makes excellent loading tools that do not require heavy duty benches. The Lee outfit is so compact it fits the average coat pocket. Everything from the sizing die to a powder measuring dipper is incorporated in these unique loading outfits. Not long ago, I talked with a shooter who has made quite a mark in the benchrest field, and he does much of his precision loading with the Lee outfit. It requires many more steps to turn out a finished shell, but time should never be a factor with the rifle and handgun reloader. The trap or skeet shooter who burns up several hundred rounds each week needs a progressive type press such as I described in the March, 1975, GAME NEWS, but the metallic cartridge buff should have little to do with speed. The Lee outfit meets all the normal requirements.

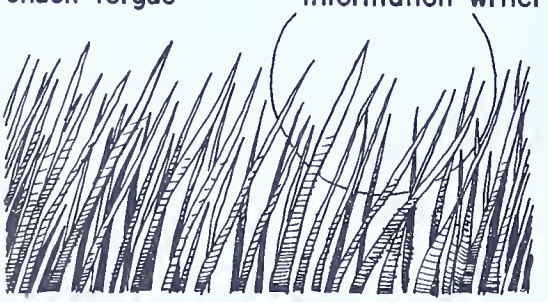
Some handloaders will voice a quick negative opinion on turret presses such as the Lyman Spar-T or their famous All American, but I can't agree. I've been using a Herter turret press for 20 years and it's turned out over 100,000 rounds and is still in good working order. There is a little "give" in any turret press, but full length resizing can be accomplished with the turret just as easily as with the C or H types. With a turret press, a set of dies and the powder measure can be screwed into the head at the same time. This enables the handloader to load a complete round without removing the case from the shellholder.

There are no hidden tricks or gimmicks in the metallic cartridge reloading field; it still boils down to taking time and being precise. Any strong, durable press will do the job, and a dozen companies offer all types of loading accessories. The best advice I can give is to follow the loading manual and take plenty of time. Stay far away from "hot" loads since they could be dangerous and reduce barrel life.

Many writers stress the financial savings handloading offers, and there is a considerable amount, but I would rather place the emphasis on enjoyment and convenience of making home fodder. No matter whether the stores are open for business or not, the handloader can whip up a batch of good reloads on a minute's notice. Handloading is rewarding and it's fun. Add a new dimension to your shooting life by assembling your own, and you may even start looking forward to your mother-in-law's visit just so you can get back to the loading bench.

In the wind

chuck fergus information writer



The U.S. Army Corps of Engineers has announced plans to install new power turbines and tunnels on most Missouri River mainstream dams. Environmentalists are afraid that the Karl Mundt National Wildlife Refuge in South Dakota, located below the Fort Randall Dam, will be adversely affected by flooding and changing water levels caused by dam operation. Surges of water outflow could also cause severe bank erosion on the 1040-acre refuge. About 15 percent of the nation's bald eagles in the lower 48 states spend the winter in the refuge.

—National Wildlife Federation

When 1975 ends, Ducks Unlimited will have spent a record $4 million to create, develop and maintain drought- and flood-proof wetland habitat in Canada, where more than 70 percent of this continent's waterfowl are raised annually. The money will be used to expand waterfowl habitat construction programs, adding thousands of acres and hundreds of miles of prime nesting shoreline to the two million acres already managed in Canada. Wetlands provide habitat for mammals, plant life and fish, as well as waterfowl. DU has also earmarked $100,000 for waterfowl wintering habitat in Mexico.

—Ducks Unlimited

The General Accounting Office, an arm of Congress, has blasted federal agencies for a lack of progress in curtailing disastrous flood losses—which exceed $1 billion annually despite an investment of $9 billion in protective works. The GAO cites lack of planning for and controlling of the use of flood-prone lands.

—National Wildlife Federation

Grants totaling $496,102 for conservation projects around the globe were recently approved by World Wildlife Fund, a private, non-profit organization which has financed over $15 million for scientific research and conservation projects to preserve endangered species and natural areas. New grants include educational projects in Latin America, conservation leadership training for Africans, wetland acquisition in Scotland and energy research in the U.S.

—World Wildlife Fund

Two captive whooping cranes produced several eggs last spring, but they were immediately snatched from the nest and placed in incubators by Fish and Wildlife Service employees. The whoopers are the first pair of the nearly extinct birds to lay eggs in captivity in nearly two decades. Only 49 whooping cranes survive in the wild.

—U.S. Fish and Wildlife Service

President Ford has enacted a law creating an eastern wilderness system. Sixteen eastern national forest areas covering 77,995 acres were designated as wilderness under the act. Seventeen additional sites will be studied for possible inclusion at a later date. All 33 areas are national forest land. The new areas are additions to approximately 11 million acres of existing wilderness located mostly in western national forests and parks.

—Wildlife Management Institute

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COVER PHOTO BY JIM BASHLINE

Most GAME NEWS readers hunt every chance they get, or trap or go camping or whatever. But there are times when none of these activities is practical, yet the urge to get outdoors is still overpowering. In such cases it's usually possible to get out of the house and at least go for a walk. Few activities are simpler . . . or more satisfying. You might, for instance, wander through the beautiful and impressive Cooks Forest, as is shown on this month's cover. But if time and distance make that impossible, you can find some other fascinating area closer home. Wherever it is, it's worth your time and effort. Believe me and go. Your soul will thank you.

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EDITORIAL . . .

Wolf Bites Baby at Fund for Animals Game

ON JULY 19, FOLLOWING A softball game between employees of WCBS-TV and the Bergen (N.J.) *Record* newspaper, held to raise money for the anti-hunting organization Fund for Animals, a year-old girl was severely bitten by a wolf as the Fund's president, Cleveland Amory, looked on. The wolf, one of two which were featured attractions at the game, its owner, and Mr. Amory vanished immediately, the disappearance of the animal resulting in the issuance of an all-points bulletin to police throughout the country. Dr. Oscar Sussman, director of New Jersey's consumer health services, said he wanted to have the wolf tested for rabies. "According to our law," Dr. Sussman was quoted, "that wolf should not have been taken out of the state. As far as I'm concerned, he was spirited away."

From all indications, the wolf never should have been in New Jersey in the first place. Jack Downs of the U.S. Fish & Wildlife Service's law enforcement division, which is taking part in the investigation, said New Jersey law requires a special state permit before a wolf may be brought into that state, and that no permit had been issued.

The incident occurred at Fairleigh Dickinson University, when the baby, Melissa Stein, daughter of Frank and Leona Stein of Glendale, N.Y., posed for pictures with Rocky, a Canadian timber wolf brought to the game by John Harris, president of an organization called Save the Wolf.

There are several versions of what happened next. The victim's father is quoted as saying Melissa was "sitting on my lap and drinking a bottle of water. Apparently the wolf went for the bottle, missed and caught my daughter's cheek instead." Another report says the wolf placed its mouth over the girl's upper cheek and left ear—"normal behavior for the wolf, an acceptance of the baby into its pack . . . an act of affection, not malice," according to Richard Kenly, New Jersey representative of Fund for Animals. Maybe so. But another observer said everyone froze when that happened and the father started to pull his child away as the wolf's owner grabbed on the leash. The wolf hung on, inflicting wounds on the baby which required plastic surgery at Holy Name Hospital in Teaneck.

After learning he was the object of a nationwide search, the wolf's owner called New Jersey officials from Chicago and promised to have the animal taken to a veterinarian for tests. At this writing there has been no public announcement from Mr. Amory, whose Fund for Animals was the beneficiary of the game. That's not unexpected, of course. He's always been a master of the hit-and-run technique. Now it's seen he's just as efficient at the old "run-and-hide."

Perhaps the most interesting question is not why the wolf and Mr. Amory vanished—that isn't hard to understand—but how the news was kept quiet

(Continued on Page 42)

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N. ROSATI

In Every Hunter's Memory There's . . .

A Place Like the Meadow

By Don Page

I SUPPOSE some people could never see anything particularly beautiful about a weed field. But beauty is in the eye of the beholder, and when the beholder happens to be a bird hunter, well, there are some weed fields that will make as pretty a picture as you'd ever want to see.

One of the best looking patches of weeds I've ever had the pleasure of following a bird dog through is on Jerry Seiler's Berks County farm. He likes to call it "the meadow," which is just a pretty name for a weed field. But it's a good looking piece of land —any bird hunter would tell you that, and the results speak for themselves. We have pushed through that field first thing on opening day for the past four or five years, and it has never failed to produce a ringneck or two.

The meadow hasn't been grazed or cultivated in recent years, probably because that particular piece of land just isn't worth it, and it has waist-high grass and weeds over most of it. The upper end is covered with briars, and a swampy little stream meanders through the middle. It's the kind of field that sets a good bird dog quivering with excitement, and I'll have to admit it sort of does the same thing to me.

We decided to hit the weed field on the opening day of regular small game season, same as usual. The weather was cool and crisp. We'd had a couple light frosts, nothing heavy yet, but the woods on Blue Mountain right behind Jerry's place were magnificent in reds, yellows, and browns. Even the pines stood out sharply, their glossy greens contrasting with the color around them. The meadow was a frost-nipped mixture of greens and browns, with the briar patch at the upper end standing out conspicuously in regal deep red and burnt umber.

Jack Reese and I had shown up at Jerry's place sometime after 8 that morning, an arrival timed to coincide with the pot of fresh coffee we knew Jerry's wife Polly would be brewing. She stuck cups into our hands as we stepped through the back porch into her kitchen.

"Where's that husband of yours, Polly?" Jack asked after he acknowledged the coffee with a grin. "This is no morning to be sleeping in."

"Sleeping in? You've got to be kidding! Jerry's been up and fussing around since 5:30. Didn't you see him as you drove up the lane?"

"Nope. All we saw was ol' Duchess trying her best to get off that leash. I think that springer knows what day it is."

"I don't know who gets more excited, you guys or that dog," Polly said. "I hope you brought Missy along."

"Oh, she's here," Jack said, referring to his Brittany. "But I left her in the station wagon. You know how she is about your cats. I sure don't want to spend the day trying to get those cats out of trees or off rooftops."

"Fat chance of that," Polly said. "I've got the little dears locked up in the basement, safe and sound."

Happy Struggles

It wasn't long before John Wolf drove into the yard. He got out, opened the trunk and took out his cased shotgun. Both dogs seemed to recognize the significance of John and the gun and began happy, frantic struggles to get free.

"Good gosh," Jack said as he looked out the kitchen window. "I'd better let that dog out of the car while I've still got some upholstery left."



A LARGE RINGNECK flushed and flew through the trees to John's left, giving him no shot. I fired and the bird tumbled into the clearing.

John is Jerry's brother-in-law, a big, quiet-spoken fellow with a broad grin. I went out with Jack to meet him.

"Mornin'," he said. "I don't believe I've seen you two since last deer season."

"My gosh, John, has it been that long?" I shook his hand. Just then Jerry emerged from the barn, and we renewed acquaintances all around.

"Are we trying the meadow first again this year?" John said as he put a fistful of 6s into his hunting jacket pocket.

"I guess we will," Jerry said. "And it'll be time to get started in just a few minutes. You guys get your gear and I'll turn Duchess loose."

The four of us had hunted this area so often together that no discussion of strategy or position was necessary. We spread out and headed toward the meadow, the dogs eagerly moving into the tall weeds ahead. I pushed two shells into my Remington, worked one up into the chamber and then added the third to the magazine. The others were doing the same when the weed patch directly in front of us exploded. No less than 11 pheasants took to the air, four of them cock-birds.

Displaying no more restraint than the over-anxious dogs, I promptly swung on the nearest rooster and punched three big holes in the sky. Jack Reese, who had succeeded in getting only two shells into his pump, disposed of both of them in a similar manner, while John contributed a single shot. Jerry hadn't even gotten his gun loaded.

The birds, without so much as a feather ruffled, disappeared into the woods to the north. The dogs watched them go, then turned back to look at us, their heads cocked sideways as if in disbelief at the sort of shooting they had just witnessed.

"Well, I'll be darned," I muttered, standing there flat-footed with my empty gun in my hands.

Then I caught sight of Polly, back at the house. She was standing behind the big bay window that overlooks the meadow and pond. As she saw me look up, she promptly began applauding in an overly dramatic manner, her smile and the delight in her eyes clearly visible even from where I stood. I shook my head and grinned back, feeling a bit foolish.

"Just ignore her, Page," Jerry said with a grin. "After all, what does she know about bird shooting?"

"She seems to have figured out the difference between hitting and missing," I said.

"Well," said Jack, "what that little display of marksmanship lacked in dignity, I'm sure we'll all gain in humility."

"Aw, shut up," I said.

We pushed through the western side of the meadow to the road, the dogs finding plenty of scent but no birds. Then we swung around to move up the eastern side of the field, where the dogs put up two hens before we reached the woods to the north. I sat

down on a tree stump and fired up my pipe.

"I think we blew it," I said, after the others had joined me.

"Yeah," Jerry added. "That's the first time I can remember when we didn't bag a bird or two out of the meadow on opening morning. Nothing to do now but settle down to some serious shooting."

We decided to cross the little stream that fed Jerry's pond and push through a large area of thick briars. Jack moved out into a cleared area to the south of the briar patch, while Jerry positioned himself in the clover field north of it. John and I began working the middle with the dogs. We had moved only a few yards when I caught sight of a cottontail, but I had no chance to shoot.

"Bunny!" I yelled.

"And birds on the ground ahead of you!" Jerry called from the clover field nearby.

Jack then moved up to the lane at the west end of the briar patch ahead of us. When John and I were 50 yards or so from the lane, two birds flushed.

"Hens!" Jack warned, then fired a single shot.

I pushed out of the briars and into the open.

"Were those hens you shot at?" I asked.

"Nope," Jack grinned. "Those were rabbits!" He held up a big bunny by its hind legs. "You pushed two rabbits out ahead of you with those hens, but I only had a shot at this one."

We decided to hunt the long, narrow wooded strip just north of the barn. A stream runs through the middle of the woods with cultivated fields on each side. This time Jerry and Jack worked the middle with the dogs, while John and I kept to the edges. We had moved about 60 yards when the dogs flushed a ringneck and Jerry dropped it with single shot, our first bird of the day. Jack got his second rabbit moments later.

Then the dogs flushed two hens and a rooster, all coming out of the trees on my side. The ringneck presented a long shot but was still within range. I missed it cleanly.

John and I moved out beyond the end of the wooded strip, as we had always done, hoping to cover anything Jerry and Jack might chase out. When they were 50 yards from the end, a cockbird flushed near me. I fired twice, missing with the first shot but hitting the bird with the second. He didn't drop and John knocked him down with a single shot. Moments later Jack and Jerry emerged from the end of the wooded strip, out of breath from pushing through briars and brush.

"There ought to be a pile of birds out here from the sound of all that shooting," Jack called.

"There's just one and John got him," I said. "I don't understand what's wrong with me today. I've had three chances now, and two of them should have been easy."

"Well, as Will Evans' uncle used to so wisely say, 'If you ain't holdin' on 'em, they won't drop!' "

"Thanks, I knew I could count on you for advice."

My Shooting at Fault

It was after 11 o'clock now, and the most productive part of the day was probably over. We should have had more than two birds and my shooting was clearly at fault.

"But you saw how I've been busting those claybirds the past few weekends, Jack. Heck, I thought I'd be in top form today."

Jack fished an apple out of his hunting jacket and bit into it. "Well," he said between chews, "Why don't you yell 'Pull!' real loud just before you shoot next time?"

"Come here, Missy," I said, scratching the Brittany behind her ears. "I might just as well talk to you as to some of my friends around here."

Jerry's property is the last piece of cultivated land against Blue Mountain, and the upper fields are contour planted in strips of corn, wheat and clover. We went through two strips

of harvested corn before lunch. Jack got his first bird of the day, Jerry got his second and I missed my fourth.

Polly was waiting for us back at the house with hamburgers, homemade baked beans and fresh-brewed coffee.

"You guys just should have seen yourselves in that meadow this morning," she said, her eyes twinkling. "All those birds and all that shooting!" She mimicked the way I had swung on them and emptied my gun. "Oh, it was beautiful!"

Jack helped himself to a cup of coffee. "You see," he said, "If any of you missed the significance of this morning's activities, what we now have is sort of a re-run of the highlights. Pay attention, and it might help you figure out what you're doing wrong."

"Polly, I've been missing birds all morning long," I said, ignoring Jack.

"Yeah, Polly, help him out. Tell him what he's doing wrong."

"Come on, you guys," I said. "Polly's never fired a gun in her life."

"Well," Polly continued, "I think it's all a question of aiming."

"Polly," I groaned, "there's more truth in that than you know. Now would some kind soul please pass me the beans?"

Birds Scarce

We went through the meadow again right after lunch, but it produced only a single hen. Then we kicked a rabbit out of a pile of old lumber behind the barn, and John took it with a single shot. After that we worked over some fields of harvested corn, where Jack got his second ringneck, but birds seemed scarce.

"I think we've chased them into the woods," Jerry said, after we had combed three more cornfields without seeing a bird. "Let's head up alongside the mountain. We can circle back and work our way through the pines, meeting at the pond just below."

"Suits me," shrugged Jack. "These picked cornfields are pretty barren."

We worked our way through the trees to the base of the mountain, then spread out and headed down toward the grove of pines below. There were birds in the woods all right, and at times we could see them running along the ground ahead of us, well out of range.

I lost sight of the others, as we were well spread out now. At one point a grouse flushed just in front of me, catching me by surprise. They are not very common here, but I had flushed another in the same spot in the previous year. My first reaction was that it was a hen pheasant, and by the time I realized my mistake it had neatly put a tree between the two of us. I never even got the safety off.

Moving down through the pine grove, I arrived at the clearing well ahead of the others. A pair of mallards rose from the pond as I approached, and I watched them disappear over the horizon. I was conscious of the late afternoon chill as I sat on a log near the pond and waited for the others. A shot echoed through the trees somewhere on the mountain above me as I buttoned my jacket snugly around my neck. After a few moments of silence, a gray squirrel scampered along the ground nearby, making hurried preparations for the approaching winter.

This particular spot held pleasant memories for me. Just two years before, while coming down through the pines and into the clearing much as I had just done, I had surprised two turkeys. They heard me just as I spotted them and moved quickly through the high grass of the clearing, running along the ground. I hadn't seen a turkey in the wild since I was a kid in New Mexico, where I had frequently hunted them. Although a turkey was the last game bird I had expected to encounter, the old instinct was still there. I picked the second bird and fired, blowing dirt up at his tail feathers. He took to the air and I lost sight of him behind a stand of small trees. Then he cleared the brush and was silhouetted against the sky,

his head and neck well forward, a bit like a goose in flight. I swung ahead of that neck and fired. The big bird crumpled and hit the ground with a thud. Moments later Jerry, Jack and John came into the clearing and I held up the bird. Jack let out a whoop. "Page got himself a turkey!" he shouted, and proceeded to thump me enthusiastically on the back.

A Turkey Buzzard!

That evening two years ago Jack and I drove back to my home in North Wales, where my wife Gwen and his wife Evie were waiting. Evie and Gwen are longtime friends, and it's been the custom for the four of us to have Saturday dinner together during the hunting season. The two gals were preparing a couple of pheasants we had taken on opening day.

Jack and I entered through the kitchen door, with me still proudly holding the turkey. My wife's not exactly a country girl, and when she caught sight of the big bird she looked alarmed.

"What's that thing?" she said as I put it in the sink.

"A turkey buzzard," I grinned.

"Get it out of my kitchen! Why on earth did you bring it home?"

Jack and I howled with delight. After we ironed things out, Jack and I finished cleaning up the turkey and some pheasants we had taken that day. By the time we'd finished and washed up, a delightful aroma of roast pheasant was coming out of the kitchen. Soon we were all at the table, enjoying a great dinner. It had been a good evening.

Gwen and Evie would be waiting again tonight, but it looked as if I would be coming home with an empty game bag. I was mulling over that possibility when Jerry walked into the clearing.

"Any luck?" I asked. "I heard a shot."

"That was John. He got another bunny. We saw a lot of birds running on the ground in front of us, but nothing flushed within range."

John and Jack soon joined us, and we decided to follow the woods down to the meadow near Jerry's house. It was getting late and we had less than an hour left to hunt.

The dogs were tired now and worked much closer to us than they had in the morning. I didn't feel like talking. My own enthusiasm had gotten the best of me in the first moments of the season, and my shooting hadn't settled down since. Well, I was getting tired too, and maybe now I'd take a bit more time on those shots—if any other opportunities presented themselves.

We spread out once more, and this time I took the position on the extreme left as we moved down through the woods. After walking 400 yards or so we came to a clearing. I was first into the clearing and I crossed it, resting momentarily on the other side to wait for the others. I saw John



JACK HELD UP a big bunny. "You pushed two rabbits out ahead of you with those hens," he said, "but I only had a shot at this one."

moving through the woods about 100 yards away, with Duchess working right in front of him. The dog was on to something, and John approached cautiously. Duchess flushed a cock-bird. It flew through the trees to John's left, giving him no opportunity for a shot, and then turned toward the clearing and came toward me almost head-on. I fired and the bird tumbled into the clearing.

I picked the bird up, admired its brilliance, and stuffed it into my game pouch, feeling the comfort of warm weight in the pouch for the first time that day. Although the afternoon had grown cold, the day seemed suddenly brighter.

John and I waited for the others to reach the clearing, and we continued on toward the meadow, the light in the wooded areas getting poorer by the minute. When we reached the meadow Jerry looked at his watch.

"Well, we've time enough for just one more swing. What do you think?"

"I'm game," I said, and Jack and John quickly agreed. We spread out and entered the meadow for the last time that day, working slowly toward its center, the weeds and briars up to our armpits.

"Missy's on to something!" Jack called, just as the bird flushed.

"Hen!" someone shouted.

A second hen flushed, and then I noticed Duchess taking great interest in an area to my left. I moved closer and a ringneck took to the air. I fired twice and the bird tumbled into the briars on the second shot. By the time we located the dead bird, the first day of the season was happy history.

Once back at Jerry's place, we looked over the game to make sure we all had an equal share, a practice we always follow at the end of the day. Fresh coffee was brewing and Jack and I had a hot cup before starting home. It was almost dark by the time we left Jerry's house, and the night was getting cold and crisp.

"Looks like a great night for goblins and ghosts to be roaming about," Jack said to Polly as we walked to the car.

"Yes, and we've got three little ones inside who are getting anxious," Polly added. The Father Frost parade in Hamburg and the Halloween parade in Boyertown were to be held that night. Both towns would be crowded.

"Don't get mixed up in all the traffic," Jerry warned, "We'll see the two of you here bright and early next Saturday morning."

We waved goodbye, and Jack pointed the car down the long lane toward the road. I settled down to relax a bit on the ride home, while Jack switched on the radio to get the score of the Penn State game. As he turned onto the road, I looked back to see the meadow once more. A big, pale yellow moon was rising over it and I could faintly hear a cockbird cackle in the woods to the north as he settled down for the night.

"Well, you pulled it out of the hat at the last moment," Jack said with a weary grin.

"What do you mean?" I asked absentmindedly.

"You got your two birds at the last minute."

"Yeah, I guess I did at that," I said. "But if we hadn't gotten a thing today, wouldn't it still have been worth it?"

Jack didn't answer. He just looked at me and grinned.

Important Correction

Information given for three counties—Snyder, Somerset and Sullivan—on page 43 of the August GAME NEWS, was incorrect in regard to antlerless deer license applications. This mistake occurred after the material was proofed. The correct information is:

County	County Seat	No. of Licenses
Snyder	Middleburg	2250
Somerset	Somerset	8100
Sullivan	Laporte	6000



MANY ANTI-HUNTING GROUPS APPEAL to women for assistance, but most of those girls and women who have tried hunting are enthusiastic about it.

What Can We Do About This Anti-Hunting Thing?

By John Madson

ANTI-HUNTING is a hard thing to weigh and measure. Is it really significant, or is it one of those phantoms that exists more in the hunter's imagination than in the mind of the public? I sometimes wonder—it seems that all Alice Herrington of Friends of Animals has to do is clear her throat and ten million of us go right up the wall.

But although our responses to our critics are often blown out of proportion, there's little real doubt that anti-hunting is a growing force, and something that hunters must watch closely and try to understand.

For as long as I can remember, there have been anti-hunters. It's nothing new. But for a long time it was a shapeless attitude, unorganized and undirected. It seemed to take on a new dimension not long after World War II, and especially in the past 15 years. There are several basic reasons for that:

For one thing, our growing population has become largely urban and suburban, losing its rural roots and forsaking the old rural arts—of which hunting is a prime example.

It's possible, too, that a long and unpopular war has helped build public revulsion against guns, violence and killing.

In recent years, the surge of environmental concern has turned some of the public against what seems to be reckless consumption of colorful wildlife resources. Add to that

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the fact that many communications media seem far more skilled in knowing how to communicate than in knowing what to communicate—and it isn't hard for modern magazines and television to arouse public revulsion against hunting.

We've heard it said that there is relatively no more anti-hunting than there ever has been—that the number of anti-hunters is larger because the population is larger, but that the proportion is about the same. I don't believe that; we can be sure that anti-hunting sentiment has increased, that it is far more effective than it has ever been, and that it makes good sense to large segments of the public.

On the personal level, there are several basic reasons for anti-hunting sentiment.

Joseph Wood Krutch felt that hunting was "the pure form of evil" which metaphysicians had long sought. Professor Krutch had no brief against killing for actual need. But killing for pleasure, or as part of a pleasurable pursuit, he felt, was reprehensible.

Lack of Reverence?

Dr. Albert Schweitzer felt that sport hunting demonstrated a total lack of "reverence for life." And as a theologian, scientist and humanitarian, he felt that reverence for life was one of the highest conditions to which man can aspire. He once said that modern man is truly ethical only when he refrains from needlessly taking life.

Many anti-hunters oppose hunting because they feel it inflicts needless pain and suffering on innocent wild creatures. Others are more pragmatic; they simply feel that our wildlife resources face enough danger under modern technology, without being hunted in the bargain.

Finally, there are those anti-hunters who feel that hunting is a barbaric pastime that we should outgrow —not for the welfare of wildlife itself, but for our own spiritual welfare. Their concern is less for the creature that is hunted, than for the man who does the hunting. That is reminiscent of Oliver Cromwell's edict against bearbaiting in the English arena—not because of any pain that it caused the bears, but because of the pleasure that it gave the spectators. In recent times in England, it has been seriously suggested that red deer be completely eliminated from the British Isles in an effort to stamp out the last of the big game hunting there. Incidentally, some of this same feeling has been directed against fishing.

There are thoughtful hunters who can see flaws in all of these viewpoints, and who can defend their act of hunting on ethical and philosophical grounds. But, as I said earlier, that's not the point under discussion.

The maddening part of all this is the fact that opposition to all hunting usually stems from critics for whom we have no real respect—critics who not only lack credentials, but who are themselves open to moral judgment.

Dr. C. H. D. Clarke, the eminent Canadian biologist, once wrote:

"If one reasonable man speaks out against us, we owe it to ourselves to seek the truth. But the voices that have been raised against us have been charged with emotion, coming not as they pretend, from philosophical heights, but from tight compartments insulated from reality. For this reason, sportsmen have scorned them."

The bitterness of the hunting-anti hunting controversy is made keener because it's almost entirely emotional. Anti-hunters, generally, are operating on pure, unbridled emotion. And to a great degree, so are the hunters. As long as both factions are entirely emotional, there is little hope of mutual understanding and tolerance.

It often seems to me that the greatest gap between hunter and anti-hunter exists at the lowest levels of outdoor experience and knowl

edge. The greater the lack of genuine outdoor mileage and perception, the greater this gap between hunter and anti-hunter.

This basic gap tends to narrow as knowledge and total experience and understanding in nature increase, and the deeply involved hunter and the deeply involved nonhunting naturalist may merge until they are indistinguishable. The image of the "ideal hunter" at the point of the pyramid will vary according to what you feel the ideal hunter should be, but I suspect that it's a balanced blend of hunter, naturalist and conservationist: a man with many polished outdoor skills and abilities, and whose affection and knowledge of nature are matched by his efforts to conserve it. Maybe this is the guy that James Fenimore Cooper called "the ideal man in the state of nature."

Those who aspire to this ideal are deeply offended by both the slob hunter and blind criticism from those who really know nothing about hunting or wildlife. Such criticism is even more biting because it is a puritanical indictment of a life style that we respect and cherish. And when such criticism comes from someone like Cleveland Amory or Lauren Bacall—who wouldn't know the difference between a Cooper's hawk and a fungo bat—it's especially irritating.

Anti-hunting criticism is with us, and will be from now on. Yet, there are some good things about it. Neither hunters nor their sport are perfect, and criticism forces the genuine hunter to examine himself and his motives — demanding that he understand himself and the resources that support his hunting. It hurts an ethical hunter to be called a barbarian who kills out of sheer bloodlust. But there's an old Korean saying: "Pain makes men think, thought makes men wise, and wisdom makes life endurable."

Out of the soul-searching that we hunters and professional conservationists are being forced to do, something good will come. We are being made to turn our eyes inward, as well as outward. It is no longer enough to say to our critics that we provide ten jillion dollars per annum to support wildlife conservation. We must defend our actions not just on financial grounds, but on ethical ones as well.



Photo by Leonard Lee Rue, III

A CRISP AUTUMN day in the field, with the companionship of a good dog and the thrill of bagging a big ringneck, appeals to women as well as men.

In the eyes of many people, our means do not justify our ends. From their point of view, modern game management is analogous to a man buying a horse so that he can beat it to death. He may have paid cash for the horse, but his act is basically cruel and without purpose.

Put it another way: there is more to being a good father than just paying the bills. The good parent gives something of himself to his children —a spiritual and ethical base, a sense of values. Much the same can be said of hunting. It is not enough that we support wildlife conservation; we must also infuse our act of hunt-



Photo by Leonard Lee Rue, III

ANTI-HUNTERS almost invariably base their comments on hearsay—propaganda put out by groups having an axe to grind. They've never known the satisfaction that comes from personal involvement in the sport.

ing with a special morality. I believe that one of the greatest responsibilities of a conservation department today is not just to manage fish and wildlife populations as well as it can, but to also be an ethical arbiter of how those populations are used by the public. The trouble is, game and fish people have had their hands so full of the first problem that they haven't had enough time to attend to the second.

Recently I was invited to speak to the student chapter of the Wildlife Society at Kansas State University. I pontificated for about 20 minutes, talking about hunting and anti-hunting to a fine group of 60 students. After that, just for the heck of it, I turned into a devil's advocate. I asked how many of the students were hunters: about 99 percent of them were. I then demanded that they defend their sport of hunting. For about a half-hour the students presented the usual threadbare defenses of hunting, and I tried to rebut those reasons as Joseph Wood Krutch or Alice Herrington might have. Some of the kids began getting mad—but they also began to think. By the time the session ended, we had all been shaken up a bit. It was the sort of thing that they'll be facing when they get out of school, and they may as well begin now. I wish I'd gotten some of that in college—it would have saved me a lot of time. It might be a good idea for a wildlife school to hold a couple of senior seminars on anti-hunting, airing the pro-and-con philosophies of killing fish and wildlife for pleasure.

Anyway, our stock defenses of hunting aren't acceptable to much of the public. To defend hunting on the basis that managed game populations can afford to be hunted is like condoning burglary of a rich man's home simply because he can afford the loss. Such a defense of hunting will not satisfy a thoughtful nonhunting public. That public has the right to demand several things of us: that the wildlife population be able to support the hunting pressure exerted on it, that hunting does not affect nonconsumptive uses of wildlife, and that the hunter conducts himself in an ethical manner.

The hunter is no longer free to act without ethical restraint. He is accountable to his sport, to the wildlife that sustains his hunting, and to the nonhunting public. This sense of accountability must be drilled into hunters if the sport is to survive. I sometimes think that whatever the future holds for the hunter, he deserves. He's probably going to get what's coming to him; whether that is good or bad depends largely on him.

In its simplest terms, the sport of hunting must operate on two principles: (1) that the act of hunting does not jeopardize the existence of any wildlife species, and (2) that the act of hunting shames neither hunter nor the animals that he hunts. Professional game managers have been pre-

occupied with the first principle, and have tended to neglect the second. Yet, if either of these principles is violated, the act of hunting is insupportable. So what can we do to strengthen these principles in the future?

Biological game management — based on good research and good enforcement of such management — is the beginning. This is basic, as is a solid information - education effort. Then comes the big problem of conducting good public programs.

The best answer that I can see is mandatory hunter-safety training, and certification of all new hunters. Actual safety training is only part of this, and perhaps a minor part. More important is education in biological game and fish management, and in the principles of ethical hunting. If there's a grassroots effort that holds more promise than this one, I sure don't know what it would be. It is important to recognize that it is not "hunting per se" which is on trial —it is the "conduct of the individual hunter" which is at the heart of the issue.

The weak point, of course, is the availability of qualified instructors. Such men must be hunters who know guns and shooting, of course, but they must also be able to convey the essence of wildlife conservation and hunting ethics—and make it stick. It's a very tough job to find and recruit such men, and furnish them with good materials, but it must be done.

To make things even tougher, there may be a critical time element.

A lot of us didn't begin hunting with a ready-made set of ethical guidelines. I sure didn't. Anything that I know about ethical field behavior, and ethical attitudes toward wildlife, has taken me 35 years to learn. And we just don't have that kind of time today; we can't leave it to chance, and let our hunters "jes' grow," like Topsy. We've got to give the young hunter a running start—a working knowledge of gun safety and conservation. And above all, we must instill in him a bitter intolerance of slob hunting. The militant anti-hunters won't give us much time to do this—they want the sport of hunting (and our state fish and game departments) to be abolished now.

Homework Sources

In the meantime, it's essential that professional wildlifers do a lot of homework on the subject of anti-hunting. Two excellent sources with which to begin are Dr. C. H. D. Clarke's "Autumn Thoughts of a Hunter" in the Journal of Wildlife Management, October, 1958, and Jose Ortegay Gasset's "Meditations on Hunting," published in 1972 by Charles Scribner's of New York. Doug Clarke is a brilliant wildlifer with a profound grasp of international literature; Gasset was a Spanish sportsman and one of the eminent philosophers of this century. Nowhere have I seen writings by anti-hunters as perceptive as these. The fact of the matter is, there has been far more good stuff written to support hunting than to condemn it. There's good reason for that—the people who write bitterly about hunting simply don't know enough about hunting to do a real job of it.

Unfortunately, that is not as true of television and motion pictures. Disney proved that. It is a simple matter to attack hunting with a motion picture or a TV special, and it can be extremely difficult to produce a TV special that captures the essence of hunting—and even more difficult to sponsor it on prime time. This is the fault of television, not of the hunter. Someone has said that American television is a sword rusting in its scabbard while we're fighting environmental battles. That certainly applies to modern game management and what it has meant to Americans and American wildlife.


ARLO GREER

Back in the April, 1974, Issue We Ran Charlie Strouphar's First "C'mon, Jr.!" Article. It Told About His Early Trapping Experiences With His Father. In This Follow-Up, Charlie—Who Is Now the Waterfowl Management Assistant at Middle Creek Wildlife Area—Tells About His First Hunting Days, More than Thirty Years Ago . . .

Part 2

"C'mon, Jr.!"

By C. L. Strouphar

I AWOKE EARLY for a Saturday morning, but this was a very special day. It was the sixteenth of September, 1941, my twelfth birthday. This meant that today Dad would take me to the hardware store to buy my first hunting license. This was the day that for quite a number of years had seemed to be an eternity away.

Lowered voices and the sounds of breakfast being prepared came up through the small register in the floor below my bed. With a jump from bed and some real fast dressing, it was probably less than two minutes until I was sitting at the table beside them. "What time will we go, Dad?" He replied that we would be at the store when it opened at 8 o'clock. From that minute on I followed close on Dad's heels; it must have irritated him slightly while he was doing his early morning chores, but he knew what this day meant to me and didn't appear bothered.

At exactly 8 a.m., we arrived at the store. Mr. Dundore was just unlocking the door, and we were his first customers. While we filled out the application forms, he kidded Dad, saying that now there would surely be more meat on the table and that Dad could perhaps slow down a little bit. The transaction did not take very long. Soon we were on our way home. When we got back to the house, I fastened my license on the back of a brand new canvas hunting coat that Dad had bought with money saved from trapping season. There was more pride in his eyes than in my own.

From the time I was seven years old, Dad had taught me to shoot and let me use the 28-ga. Parker he prized so much. This gun was ideal for a young person starting to shoot, as it was light, had a short stock and did not have much recoil. Whenever we could afford it, Dad would buy some clay targets and throw them from a hand trap for me to shoot at. In the beginning he made them pretty easy, but as time went on they were thrown so they'd be hard to hit. All through this training period he voiced his philosophy on hunting and woodsmanship, always stressing safe use of guns. The number one rule was never to point your gun toward anyone.

"Shoot the Rest"

When Dad would get enough money to shoot a round of clay targets from a regular trap, he would shoot the first dozen and then call, "C'mon, Jr., shoot the rest of them." What a thrill this was for me! Not only did it mean that I would be standing alongside adults, but that I would also be using a 12-ga. shotgun. Later it occurred to me how much Dad must have loved me to give up this part of his shooting. He enjoyed shooting trap and did not have the money to do it as often as he would have liked to. Quite a few years later, I had a reasonable measure of success in the sport of trapshooting and attended the Grand American at

Vandalia, Ohio. That brought a gleam to Dad's eye, and I hope he felt it was all worthwhile.

At last the first day of small game season arrived. Although I had lain awake half the night in anticipation, being sleepy did not bother me that morning. After a quick breakfast, we gathered our equipment and left for the area around Greble. As Dad was a deputy game protector, he regularly patrolled this area, the center of Farm-Game Project 23. This project now has grown to better than 20,000 acres, and more than 200 cooperators.

No Violations

That morning, no violations were observed and at 8:45, Dad pulled into a parking area near a tract of land that had not been farmed for quite a number of years. It is northeast of Fredericksburg and was known to local hunters as the Newlands. It was a favorite hunting spot for many, and the dozen or so hunters awaiting the opening hour were known to Dad and some also to me.

There was a lot of good-natured kidding in the few minutes remaining before 9. At last it was time to hunt, and the pressure was building up within me. Dad went over some last-minute instructions, and we began to walk toward a patch of briars. We hadn't walked 20 yards when a rabbit ran out in front of me. Both my shots were three feet behind him. Dad quickly threw his 12-ga. to his shoulder and killed the rabbit with one well-placed shot.

Now it was time for another lesson, that of removing the entrails. While holding the rabbit by the hind legs, Dad quickly removed the belly fur and cut up the abdomen; then he held the rabbit by the head and hind legs, gave it a jolting swing, and out came the entrails. While he was doing this, he said that in my excitement I had stopped my swing and therefore had shot behind the rabbit. Shoot where they are going to be and not where they are unless they are going straight away from you, he told me. In later years he would say that one shot pellet in the head is worth a dozen in the other end.

After he hung the rabbit from the ring hooked in his belt, we began to hunt again. The shooting was picking up, and Dad remarked that more hunters were in the field than last year. Suddenly there was a barrage of shots to my right and someone yelled, "He's coming over!"

I looked up just in time to see a large cockbird sail past. I shot, and the ringneck came to earth about 30 yards to my left. This was my first piece of game, and Dad picked it up and shoved it into the game bag on my coat, patting me on the back and complimenting me on a fine shot. We hadn't gone much farther until another rabbit fell to his good shooting eye.

About 15 minutes later, he stopped very suddenly and then backtracked, motioning me to come close. When I was by his side, he pointed to a spot in the briar patch. At first I couldn't see what he was pointing at, but in a few seconds was able to make out the head and eye of a well-concealed



FROM THE TIME I was seven years old, Dad had taught me to shoot and let me use the 28-gauge Parker he prized so much. The gun was ideal for a boy.

rabbit. Dad whispered that I should hold for the eye and squeeze the trigger. Taking careful aim resulted in a clean kill and also a clean carcass free of shot.

Now it was my turn to remove the entrails, and while it did not go too smoothly, it was not as hard as it had appeared to be. In those days, shooting a rabbit in the nest meant good, clean meat on the table. I believe in this today and consider it better than having a crippled rabbit crawl into a hole to die.

By this time it was close to 10:30, and Dad said we would have to quit as he had to patrol and check other hunters. I was disappointed, but as I knew this was his job I did not protest too much.

During the course of the checking, he picked up some violations, including more than the three-shell limit, over the limit of game, and one hen that had been killed by mistake. At 3 that afternoon he said he would hunt for a while, and then he would take me home as he had to meet another deputy and patrol until late that evening.

We came to a farm that belonged to one of Dad's good friends who had been a farm-game cooperator for a long period of time. He said that the hunters had overlooked his pasture even though he had no cattle out, and he was sure we would find some rabbits sitting in the clumps of grass. Dad asked him to join us, but he said he was satisfied with his earlier bag and that he had some chores to do.

We had covered about half the pasture when I spotted a very fresh rabbit nest. I yelled to Dad that here was a very nice nest and poked the tip of my shoe under the entrance so that I could see it better. Out ran a very large rabbit, scaring me so bad that both my shots again were behind him. This turn of events amused Dad, and he had quite a laugh over it. After the initial hurt feelings were over, I must admit that it was quite funny, and to this day, 34 hunting seasons later, such occasions are still amusing. Wild game outsmarting us, even with our modern equipment, is very much a part of the total enjoyment of hunting.

No more game was seen, and we returned to the car. The farmer had seen my experience from the barn, and again I was subject to some good-natured kidding, this time in Pennsylvania Dutch, which I could understand but couldn't speak too well. Dad told him that I was a good pupil and would make a better hunter than he in time to come. This made me feel a little taller.

Mom's Chore

Dad dropped me off at home and left for his duties. Mom went right to the chore of cleaning the game that we had bagged; all through the seasons she would perform this chore, with the exception of squirrels, which Dad and I would clean. With two hunters in the family, we should hopefully have more game and the budget would stretch a little farther, she said. Although no monetary value was placed on a piece of game, it was recognized that each meal so provided certainly helped in a time of irregular and small paychecks.

All through my first season I hunted with Dad whenever time permitted. When he had no work during Thanksgiving vacation, we spent three wonderful days together. Thanksgiving was a very special hunting day for Dad. In the morning we would hunt small game and then return home about 11 to prepare for a fine meal that Mom would be making. Thanks were given to God for our many blessings, including the privilege of hunting. After resting up, and as Dad would say, letting the meal settle a little, we would leave for the Little Mountain and some late afternoon squirrel hunting.

As much as possible, this procedure is carried out today the same as it was then. All through those early years the training went on and the experiences increased, as hunting became a larger part of my life. Dad

passed away before his grandson was old enough to hunt, but not before he had given him the same lessons with the 28-ga. that he had given me, and two weeks before he died he told me to be sure to start him hunting with this gun. His wishes were carried out to the letter. My son is grown up now, and I believe his hunting experiences helped him mature.

Hard to Believe

When I was young, few voices, if any, were raised against the sport. In fact, most families had at least one member who hunted. So when I first became aware of the anti-hunting sentiment, I found it hard to believe. Reading and listening to their arguments made me sit down and take stock of what was so strongly a part of my character. Was hunting right and proper, or was it dead wrong?

First, what does hunting mean to me as an individual? This is hard to put into words, but as near to my feelings as possible, here it is. The thrill of being in the great outdoors with my son, other fine companions, or by myself . . . the outsmarting of wild creatures, who more times than not outsmart us—after all, we are in their backyards and not our own . . . when game is bagged, the enjoyment of eating it. . . the working of a good dog, the feeling of a fine gun, the ability of relating to the early pioneers, the feeling that one could live off the land if it was necessary, a good clean kill or, by the same token, a clean miss. In short I just enjoy every aspect of hunting.

Then I asked if we as hunters are hurting wildlife populations or ruining the ecosystem. From the time sport hunting became a reality and market hunting was banned, not one species has been in trouble because it was hunted. Some species are in trouble, but this is because of habitat loss.

PFSC to Meet

The fall meeting of the Pennsylvania Federation of Sportsmen's Clubs will be held September 18-20 at the Embers Motor Lodge, Carlisle, Pa. Committee meetings, including those of the Fish and Game Commissions, will be held on the morning of September 19, with the general session that afternoon and the banquet in the evening. The PFSC, with a membership of some 160,000 sportsmen, is the largest group of its kind in the country.

Without poring over all sorts of facts and figures, one has only to look at the history of wildlife in Pennsylvania to see what the hunter and his dollars have been able to do.

The hunter spends his money to provide more habitat and maintain existing areas, and to provide law enforcement which protects non-hunted as well as game species. When the survival of a species is threatened, the hunter insists on stern measures to insure its survival and backs them up with dollars.

There is no way that wildlife can be left completely to fend for itself. The existing habitat will only support so many, and the surplus will be harvested one way or the other. Sport hunting and natural predators keep wildlife wild and aid them in their fight for survival.

So I decided I was proud of my hunting heritage. I will defend and promote it to the best of my ability, and I am convinced that the greatest single factor in insuring healthy, stable wildlife populations for future generations is for more Dads to say, "C'mon, Jr., let's go hunting!"

My, How Amazing

The horns of male antelope fawns start to grow when the young bucks are about ten months old.

The Day I Couldn't Miss

By Don Lewis

Photos by Helen Lewis

THE THUNDER of a rising grouse broke the silence of the cold November morning. My heart skipped a beat. Out of sheer instinct, I spun a half circle, trying to locate the departing bird. A flash of brown streaking up into the horizon's brightness forced me to swing farther, as I slapped the short 12-ga. pump to my shoulder. It was a reflex shot, pure and simple, but there was not a moment to lose. I fired the instant the bird cleared a stand of scrub oak.

It was all over in an instant. I thought I had missed, but the reassuring sign of dozens of small feathers floating lazily through a shaft of morning sunlight indicated a solid hit.

While reloading, I carefully made a mental note of where I had last seen the grouse. I knew from experience a downed grouse is hard to find in brown leaves. When I reached the area scattered with feathers, it was impossible to tell exactly where it had gone. A tell-tale dangling limb was the first clue to where the shot charge passed. Judging from its height, I assumed the bird's momentum would have carried it another 10 to 15 yards.

My search was to no avail, and even my beagle Rip couldn't contribute anything. I conceded it was hopeless and gave up. However, a half hour later and 50 yards from the dangling limb, Rip's young nose led him to a large huckleberry bush containing the grouse. The bird had apparently been killed instantly or had died very close to the bush, as it was buried head first in the maze of limbs. I was happy to find the bird, and trying to figure what had happened would only have reduced my hunting time. It was a perfect way to start a day, but what I didn't know was that there was more to come.

By the time I entered a swale along a creek, the sun's brightness was everywhere and much of the morning's chill was fading. I've always worn a glove on my left hand but never could manipulate a shotgun's safety and trigger with my right hand in a glove. Forced to this day because of the bitter cold, I lost no time in stuffing the right glove in my game pocket when the sun made a full appearancc.

That little move cost me a shot at a rabbit that took off under my feet and disappeared in the thick weeds of the creek bottom. Rip was young and inexperienced, but he swung in full pursuit and filled the frosty air with excited cries. Up the creek and over the hill the chase went as I maneuvered to a rotted stump that gave a



MY BOOTS HAD barely hit the rock when the rabbit scooted toward me 60 yards away. This time there was no need for hurry of any type.

good view of the land below. Minutes rolled by as Rip worked to untangle the rabbit's course. A long period of silence led me to believe the chase was over; then Rip cut loose with frantic wails and the speeding rabbit jumped the creek 30 yards away. I took another fast shot, and again the short, lightweight pump hit my shoulder in a sweeping move that gave me just enough time to dump the bunny.

Rip started barking again, and I scolded him and told him to get off the old track. But my chastising stopped as Rip took off down the creek. A change of creek sides made a new lookout imperative, but luckily a protruding rock stuck over the creek side and gave unlimited view.

My boots had barely hit the rock when the rabbit scooted toward me 60 yards away. This time there was no need for hurry of any type. It was clear the rabbit would pass over 40 yards from me, and with a quick motion, I turned the C-Lect choke of my Mossberg 500 ARK to full, slipped off the safety and cut loose when the front sight swung by the rabbit's nose. Rip wasn't far behind and was even kind enough to carry the rabbit across the creek.

With a grouse and two rabbits bulging from my coat, I was well satisfied, but the desire to try for another grouse set me walking toward a hillside thick with grapevines. Rip's enthusiastic bouncing in front of me cost me a shot, as a bird got up 50 yards in front and left the county. Pushing higher on the hill paid off as a grouse took off low but came out in the open below me. Remembering I hadn't changed the choke, I held fire until the grouse was well out in front before dropping it with a well-pointed shot.

I'm not a greedy hunter and seldom shoot the day's limit of any game, so I headed for my vehicle parked along a tram road in the woods. Stopping a few yards from the car, I unloaded just as a rabbit ran down the road with nary a twig between us. I smiled. That's what I like about hunting; the unexpected almost always happens.

In Hot Pursuit

I'm still not sure where the rabbit came from, but Rip took off in hot pursuit. His steady wailing let me know he was pushing hard, and then, way up ahead, I saw the rabbit jump the old logging road and disappear. Rip roared by a minute later. I sighed and stuffed some shells in the gun. After all the energy he was putting into the chase, I felt I had to do my part if he brought the quarry within range.

When five more minutes passed and Rip still hadn't returned, I threatened him with some choice adjectives including twisting his collar till his tail fell off. Strange things happen on some hunts, and while making a lot of noise I was surprised to see the rabbit headed my way like an express train. I had to fight a couple vines to get swinging room, but my shot scored a direct hit.

By this time, my confidence had risen to an all-time high. Five shots and five pieces of game. I had had some very good days in the past, but the type of shooting I had done was enough to send any hunter into ecstasy. Now I was obliged to try for rabbit number four.

A desire for a cold drink of spring water sent Rip and me back up the logging road to an old, abandoned



farm. The old spring was just as cold as ever, and both Rip and I took a long drink. Little did we know a cottontail was crouching less than five feet from the spring.

I was caught empty-handed when Rip routed the rabbit; my shotgun was three steps away resting on the ground. Again, I just stood and watched the chase up the farm road into the woods.

Fifteen minutes of steady howling from Rip convinced me to move up the hill. I ate a candy bar while hiking along the fading road, keeping an eye open for signs of the wary rabbit. A sudden, high-pitched outbreak from my beagle quickened my steps when I realized the cottontail might cross the old trail just over the ridge top. This was enough incentive, and even with my full load of game I broke into a fast trot. Puffing and struggling, I hit the top at a good clip only to have the rabbit whip by even faster.

I tried to slam on the brakes, but it took ten feet or more to slide to a halt. I'm certain the cottontail poured on more gas, and I did some fancy footwork getting back where I could see, but believe it or not I made it and brought to an end a perfect hunt.

I haven't had too many days when the Red Gods smiled constantly, nor would I want a steady diet of total success. To me, there's far more to hunting enjoyment than just connecting with every shot. Real hunting humility is the end product of missing the easy shots now and then, and I'm a genuinely humble hunter. But it was a day I will long remember, and I'm just as sure nearly every reader has experienced a similar outing.



RIP WASN'T FAR behind when I rolled the rabbit as it raced by, and was even kind enough to carry it across the creek for me.

Hunting is a way of life with me, but I've never wanted success handed to me on a silver platter. I give it everything I have but don't live in total disappointment when the cards are stacked the other way. I take it as it comes and, to me, one of the great thrills in hunting is the unexpected, and I sure had my share of that on the day I couldn't miss.

Trappers Harvest 3517 Beavers

Pennsylvania trappers harvested 3517 beavers during the trapping season this year, according to Game Commission figures. The 1975 harvest was below the 5369 taken last year, but in line with figures for 1970 through 1972. Although Pennsylvania's prime beaver range is in the northern part of the state, flat-tails were taken in 50 counties this year. Crawford County was the top beaver producer again this year, yielding 427 pelts. Following were Wayne County, 295; Erie, 253; Bradford, 231; and Pike, 219.

Wildlife - Youth - Education - Tomorrow

How Do They Mix?

Sportsmen care . . . or do they? The farther people drift from the soil the less they understand the natural world, and the more they attack the sport of hunting. Today, few youngsters are growing up in rural communities. If sportsmen do care, they must try to ensure that our schools offer accurate environmental programs. The following overview, personal comments, and suggestions for interested sportsmen are intended to stimulate concern for your local school. You can help . . . do you care?

ENVIRONMENTAL EDUCATION is not a discipline. It should not be a period of the school day following algebra and preceding English. Rather, it is conglomerate of subjects cemented by the individual's awareness of his surroundings—an awareness that includes understanding, concern and conviction, and penetrates the tangibles of our society to uncover hidden things that can make life rewarding. What results is a philosophy that helps the individual become a knowledgeable and responsible member of our society.

Sound educational programs reflect our dependency on soil-plant-animal-man relationships. Education cannot and should not be separated from the environment, especially since our surroundings can stimulate real learning.

Wildlife is only a single part of our environment, but as it's dynamic it attracts our attention more so than the particulate matter in a sunset or the pH of a mountain stream. As such, an accurate interpretation of this resource by a teacher or group leader is critical. By properly understanding wildlife, students experience a deeper appreciation for the environment.

As part of a course entitled Wildlife Studies, offered at Spring Grove Senior High School (York County), students are asked to compose their philosophy toward wildlife and the outdoors. Expression is an important part of learning, and when shared with classmates this experience is both meaningful and popular. It's especially valuable to listen to the opinions of one's peers. Some of their thoughts included:

"I feel closer to myself when I'm in the forest."

"Nature seems to bring out a new awareness and sensitivity."

"The outdoors and wildlife help me find peace with myself."

"Recognizing it [wildlife] has been a good experience for me which I hope to expand in the future."

"Can you imagine how still and silent the summer nights would be without crickets and other night animals?"

"Wildlife is the real quality in the outdoors."

A Recent Graduate

Karen Bortner is a recent graduate of Spring Grove High School who attended the Wildlife Series course. Here, she gives her thoughts on school experiences which have significantly affected her thinking. To give further insight into this area—from the other side of the desk, we might say—immediately following Karen's article we are presenting a piece by H. Francis Rosen, a superintendent of schools in the northeastern part of the state. This is the first of three articles on this general subject by Mr. Rosen. The other two will appear in upcoming issues of GAME NEWS.

—Lou Hoffman
Wildlife Education Specialist

And We Call It Progress

By Karen Bortner

RECENTLY, many people have taken a greater interest in the outdoors. As our knowledge and technology expand, our minds are steered toward gadgetry and needless luxuries. People grow farther and farther from the natural world, and even begin to destroy the land. Beautiful places begin to change and highways, houses and industrial complexes replace fields and woodlots. Little by little, plant and animal life decline—and we call it progress.

Fortunately, there were people who realized what was happening and cared enough about our natural environment to take action to conserve it. Naturalists and conservationists, now lumped together as "environmentalists," worked to improve and protect the environment. Their concern brought about programs, stimulated research, and opened many minds to a better understanding of wildlife.

Education has helped promote this renewed interest. I know my life has been greatly enriched by an increased awareness of wildlife through a course offered at my school. Wildlife Studies is an excellent program favored by many students. As well as studying wildlife management in the classroom, we also went on field trips to a few wildlife areas, including Hawk Mountain Sanctuary, Middle Creek Wildlife Management Area, and a few local parks and lakes. We observed and identified different types of songbirds, game birds, hawks, waterfowl, and various types of plant communities. Each of these trips was valuable, but when woven into a structured course they complemented our studies. All course activities prompted a better understanding of the interactions between man and nature, and the harmony and friction that are ever present. These are important concepts for young people to grasp.



Nolde Forest Environmental Education Center

EDUCATION PROMOTES interest in the environment, and education, basically, is arousing curiosity in the minds of youngsters and then helping them to find answers to their questions.

Because many principles of value and quality are involved in a course like this, the program should be taught by teachers who are interested and involved in the outdoors. They can explain the significance of wildlife to man's life and hopefully show young people the value of wild things. By sharing personal outdoor experiences with students, teachers help stimulate individual involvement. According to our teacher, getting involved in the outdoors is the best way to find out "what's happening." I found myself going outdoors as much as possible and soon discovered a world of beauty and freedom.

For me, each successive outdoor experience brings a richer feeling of the value of life—and the reality of death. I see different things each trip afield, even in the smallest

forms which before seemed quite insignificant. Regardless of size and shape, all living things have an important role in the chain of life. Their activities, functioning together, create a fascinating drama of survival.

In the outdoors, each life form is unique, and therefore has a special quality. But perhaps the greatest quality of the outdoors is life itself. Only life produces life, and man in his humble way can only look on and assist in times of severe disturbance.

Wildlife continues to hold many more secrets which I have yet to discover. And I've only recognized a small portion of their significance—but it's a start.

As the Twig is Bent

By Hank Rosen

Some years ago, in cooperation with a district game protector, I instituted a conservation workshop encompassing an entire school district. After an article describing this workshop was published in the November, 1964, issue of GAME NEWS, I received requests from no less than fourteen school districts asking how the program had been implemented and how they could put such a program into effect. I was pleased to learn that the article had been read by so many people in the field of education as well as by many thousands of sportsmen throughout the Commonwealth. The primary purpose of my current series of three articles, of which this is the first, is to show the sportsmen of Pennsylvania various ways in which they can assist the schools in providing outdoor education programs for the young people of their local communities.—HR

ALL TOO OFTEN, teachers in classes are completely inundated with course requirements and spend a great deal of their time just trying to carry out their day-to-day assignments. Frequently, they do not have the time to sit back and reflect upon other areas of study which easily could be incorporated into the school program and are recommended by the State. Here is an excellent opportunity for the sportsmen either as individuals or as members of representative groups to become involved in the offerings of the schools; to provide assistance so as to give the youth of the community the benefits of those years of experience, the skills, and the insights of those who spend great amounts of their time in the outdoors.

This kind of a program is not limited to the rural or suburban area, but is just as easily operated in the large metropolitan school. The purpose of this first article is the "Library in the School" and how it can become a center for outdoor learning. This is not the sterile, old-fashioned library which many of us remember from our youth. This is the modern approach to the school library as a media center, a center wherein can be found everything from magazines, through films and tape recordings, all on the level of the learner. The librarian who has a keen awareness of the interest of his or her students will provide them leisure reading and information materials which are both interesting and on a level for these children to absorb.

Unfortunately, school libraries frequently are beset by a lack of funds, and in some areas the priority of money used for outdoor, environmental, or conservation aspects ranks fairly low. May I suggest that in such an area a wealth of material is available within the community from local

sportsmen. Members of sportsmen's groups can certainly make available either subscriptions of outdoor magazines to school libraries, or provide the libraries with last month's issues of these magazines.

In my own school district, the most widely read of all publications, believe it or not, are those which have to do with the outdoors. The accompanying list of magazines will help you select some titles for your school. Though mentioned in the past it bears repeating that the Game Commission authorizes one complimentary subscription of GAME NEWS for the library of each school and college within Pennsylvania; requests for such subscriptions should be made by school librarians.

I know of one rod and gun club which devotes the proceeds from three of its monthly turkey shoots per year to the local school, with the provision that these funds be used to purchase subscriptions to outdoor magazines or to be used in a related manner. My own copy of *American Rifleman* is given to the high school library. This is a most worthwhile venture and one which will not be turned down by high school libraries.

If your school district does not have an outdoor corner or a wide selection of materials, films, filmstrips, magazines and books available for the children, it is your responsibility as members of the community either to inform the school district of your desires, or through some organized means to assist the school district in providing these materials for the students. In many areas, state-wide proclaimed days such as Arbor Day, etc., receive very little notice and are treated lightly, if at all. The organized sportsmen of the community can become involved in most worthwhile projects if they stimulate through the use of books and magazines further participation in this kind of event.

As most libraries act as the center for information and reference in the schools, it would be of extreme help to many schools were their librarian to have on file a list of names of men and women in the community who will serve as speakers or resource people, to come in and talk with individual classes or large groups con-

PGC Photo by CIA Steve Kish

A SEMI-CLEARING MAY SEEM DEVOID of all life, but young people find an amazing number of things to interest them when they look closely.



cerning the various parts of an outdoor education program. Frequently, teachers would like to put such material into the curriculum but do not do so because they don't know where to obtain these people. If your community includes any gunsmiths, biologists, game growers, or others who serve in some area of the ecological movement, the school library would be the logical place for a list of such experts to be kept. These could be subsequently drawn upon by the school's professional staff.

Another idea which has great practical use is to invite your school librarian to speak at a meeting of your local sportsmen's club so you can learn first-hand the needs of the school library. You may be surprised to hear how much reading is done in books of the outdoor type, the kind that you and I know and value.

My next article will show how environmental education, conservation, and outdoor topics can easily be utilized in some existing classes of the local school level.

Suggested Periodicals

American Forests, 12 issues per year, cost $7.50, 1319 18th St. NW, Washington, D.C. 20036.

Atlantic Naturalist, 4, $5, 8940 Jones Mill Rd., Washington, D.C. 20015.

American Rifleman, 12, $10; **American Hunter,** 12, $7.50, 1600 Rhode Island Ave. NW, Washington, D.C. 20036.

Audubon, 6, $13; **Audubon Field Notes,** 6, $8, 950 3rd Ave., NYC, 10022.

Conservationist, 6, $2, Dept. of Environmental Conservation, Albany, N.Y. 12233.

Ducks Unlimited Magazine, 6, $10, P.O. Box 66300, Chicago, Ill. 60666.

Field & Stream, 12, $5.95, 383 Madison Ave., NYC 10017.

Fur-Fish-Game, 12, $4, 2878 E. Main St., Columbus, Ohio 43209.

Guns & Ammo, 12, $9; **Petersen's Hunting,** 12, $9, 8490 Sunset Blvd., Los Angeles, Calif. 90069.

Gun Week (newspaper), 52, $6, P.O. Box 150, Sidney, Ohio 45365.

Living Wilderness, 4, $4, 1901 Pennsylvania Ave. NW, Washington, D.C. 20006.

National Geographic, 12, $8.50; **National Geographic World,** 12, $4.85, 1616 H St. NW, Washington, D.C. 20006.

National Parks & Conservation, 12, $12, 1701 18th St. NW, Washington, D.C. 20009.

National Reporter, 10, $5.50, 1346 Connecticut Ave. NW, Washington, D.C. 20036.

National Wildlife, 6, $7.50; **International Wildlife,** 6, $7.50; **Ranger Rick Nature Magazine,** 10, $7, 1412 16th St. NW, Washington, D.C. 20036.

Natural History, 10, $10, Central Park West at 79th St., NYC 10024.

Outdoor Life, 12, $6, 380 Madison Ave., NYC 10017.

Rifle Magazine, 6, $6.50; **Handloader,** 6, $6.50, P.O. Box 30-30, Prescott, Ariz. 86301.

Science, 52, $50, 1515 Massachusetts Ave. NW, Washington, D.C. 20005.

Scientific American, 12, $10, 415 Madison Ave., NYC, 10017.

Sierra Club Bulletin, 12, $5, 1050 Mills Tower, San Francisco, Calif. 94104.

Sports Afield, 12, $7, 250 W. 55th St., NYC 10019.

Texas Parks & Wildlife, 12, $4, Texas Parks & Wildlife Dept., John H. Reagan Bldg., Austin, Texas 78701.

Wyoming Wildlife, 12, $3, Game & Fish Dept., Cheyenne, Wyo. 82002.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Fast and Fancy Revolver Shooting, by Ed McGivern, Reel Trophy, Inc., PO Box 19085, Portland, Oregon 97219, 484 pp., $10. There's little doubt that Ed McGivern was the most fantastic revolver shot that ever lived. On one occasion, before witnesses and using an electronic timer to determine his speed, he put five shots from a Smith & Wesson .38 Special into a palm-size group in two-fifths of a second. On many other occasions he approximated this feat. Yet the account of this shooting makes up only a small part of this book, originally published in 1938 and long a collector's item. All aspects of fast, accurate double- and single-action shooting are covered, including information on practical revolver shooting for law enforcement officers.

Tips to Improve Your . . .

Success On Doves

By Nick Sisley



POSITIONING DECOYS SO THEY are skylined—either hung on a tree, strung on a wire or placed on the edge of a gravel pit like these—will make it easy for incoming birds to spot them.

I CAUGHT THEIR speeding forms as they came over the tops of the trees—skylined. There were seven doves in the flock, and each was trying to outrace the other to the gravel pit where I was hidden. Suddenly they cupped their wings in unison and, like a squadron of World War II P-51 fighters, peeled out of formation one by one. They plummeted toward the gravel pit where they would take on stones and grit that would later grind the wheat seeds in their crops. If you don't think birds dive-bombing from 50 yards up are tough to hit, guess again.

My side-by-side came up in a blur and found that familiar niche against my shoulder and cheek as the first bird came within 10 feet of terra firma. The improved cylinder tube of the 12-bore barked. Feathers flew, but somehow the dove managed to maintain flight. His six feathered friends above switched on afterburners. But I couldn't concentrate on them. I had to stick with the bird I had already hit. When everything looked right, I pulled the back trigger of the double, and he crumpled. That made my sixth bird. I checked my watch; not quite 5 p.m. Plenty of time to limit out yet.

I ran to retrieve by prize. Bird in hand, I hurried back to my hiding spot, next to the pole that broke my outline. I kept turning my head from side to side, scanning the horizon, hoping that one of the six remaining in that flock would decide to return.

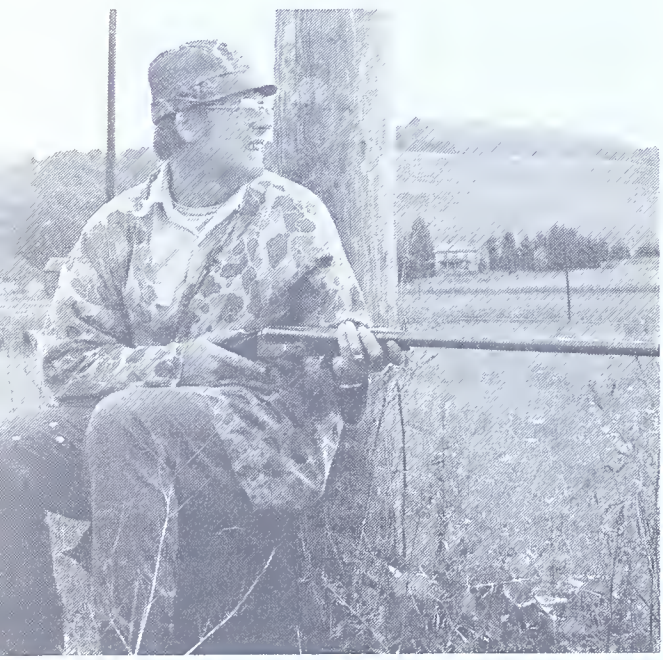
I'll be the first to admit that the most challenging dove hunting an outdoorsman can encounter is pass shooting. But that's not the type of gunning I was enjoying on this dove shoot. I've experienced super dove pass shooting in several hotspots in the United States, Mexico's Yucatan, and perhaps the granddaddy of them all when it comes to dove shooting—Colombia, South America.

But let's face it, most of us live in areas where there are only fair numbers of these flitting bullets. When we can find a top flyway, we are going to station ourselves properly and enjoy that pass shooting to the utmost. However, unless you hunt an area where doves are phenomenally abundant, it's often a waste of time to concentrate your efforts on pass shooting. To find a flyway hotspot is almost impossible in borderline dove country. How, then, can the average dove shooter—especially the

ones who only bag a few doves per trip—significantly improve on his success?

Here are some common sense suggestions that hopefully will put more doves in your game pouch. Keep in mind that each of these suggestions —taken individually—won't improve your success 50, 40, even 30 percent. However, each suggestion will help to a small degree. And if you take all suggestions to heart, and then practice each diligently, there's a good chance that your success on doves will be increased by 50 percent or more.

The dove hunter's first job is finding a top place to hunt. If you live where these birds are abundant, it pays to find good pass shooting. In average dove country, find where the birds come in to pick up grit and gravel after a feeding session. Such a spot is particularly effective, simply because birds concentrate at gravel and you have more opportunities for shooting, more opportunities for limiting out. You can't expect to put 12 birds in your game bag if you see less than that number during your outing. Fact is, most of us have to see and shoot at a heck of a lot more than 12 to even have a chance at a limit.



NICK SISLEY sits so utility pole obscures his outline. This gives good visibility and room to swing his favorite 12-ga. Parker, while he remains inconspicuous.

Although I think pass shooting is the most challenging, I look at the other side of the coin, too. It's a thrill to see one or more birds winging directly to the stand you have carefully chosen. Sometimes those incomers present close-in shots. It's tough to explain the feeling one has when he sights a bird 300 yards off, driving with hard wingbeats. You wonder if it is going to come within range. It swings a few degrees left, and your heart sinks a little. But then it jinks back on course. Hopes are high again. Suddenly it's upon you. Wings are cupped, and the speed of descent comes super-fast. You don't even remember snipping off the safety, nor the automatic shouldering of your piece. The shotgun barks! More often than not the bird goes into aerial acrobatics if the pattern of shot is not centered, then vacates the premises in short order. I think our Air Force fighter pilots might learn a great deal if they studied the escape maneuvers of doves closely. It's a supreme thrill to have just one bird come in like this. When four or five do it, they leave me talking to myself. When seven to a dozen put on such a performance, I lose my cool entirely. So find a good place for doves. That's one of the big secrets to success.

Bringing Them In

The second most important factor in bagging more doves is bringing those that you see within range of your gun. Several things will help. I am of the opinion that camouflage clothing gives the dove hunter an edge. It is more important to shooters who gun places like gravel pits—where birds are often lured in close —than to those lucky enough to know flyways where they take the high, fast birds.

Concealment and where you pick your stand are also very important success factors. Doves aren't as wary as some of the other birds American

gunners pit their skills against—like black ducks, crows and Canada geese. In comparison, it is "duck soup" to bring a dove within range. But this isn't to say that doves are complete idiots. They are wary to a degree, so the more difficult you make it for them to see you the easier it is to bring them in.

Where possible I like to take a stand with a good, unobstructed view. If there's a pole available, I sit or lean against it. Fencerows also break up your outline, but you have 50 percent of your view obstructed. It's not always possible to choose a spot where you have a 360° view of the skyline, but the amount of unobstructed view you have should always be considered. Where you set up your dove stand and how well you are concealed will certainly put an average of one or two more birds in your bag on each good shooting day.

Not using decoys for doves is a big mistake. The whys and wherefores of how they can be so beneficial and how to set them up is a subject deep enough for an entire article. Suffice it to say that doves, like almost every one of their feathered brethren, always seem to be looking for other members of their species. You know the old saying that birds of a feather flock together.

Shooters all over the world have learned the advantages of using decoys for ducks, geese, and crows, birds that are all extremely difficult to bring within range. Perhaps you've noted how a dove was headed your way, then suddenly noticed a lone, live dove perched on a wire a hundred yards off. It's discouraging to have those incomers sidetracked. You wonder why the dove has to go over and say hello to a compatriot. But it's going over there to visit with a friend because that's its nature. Don't let this trait be a disadvantage to you. Take advantage of it.

Whether you use six or 60, dove decoys are unquestionably going to mean more birds in your game pouch. Set some of the decoys high, skylined. The rest can be on bare open ground, or perched on sticks in fields. You might try hanging decoys on leafless snags, fence wires, any place you can get them off the ground where it is easier for flying doves to spot them. You might even try bringing your own two poles. Force them into the ground with a wire stretched between, and position several decoys on the wire. All you have to do is make your decoys obvious—easier for the real birds to spot. I am not saying that every dove within the county will suddenly zero in on your decoy stool; all crows don't come into your crow decoys and all ducks don't come into your duck decoys. But some do. Decoys for doves are just another tool that puts another bird or two into your bag each day you have a good shoot.

Decoys

When I bag a dove I place it beneath the area where my skylined decoys are overlooking the situation. These dead birds are propped with wings in tight, their heads elevated with an empty wad, shotgun shell or small stone. You don't think it will work? I've had live doves land right in the middle of my dead, propped ones.

Doves are tough to kill—at least I think so. Maybe it's because I have the faulty habit of too often hitting the posteriors of the birds I shoot at rather than the "fronteriors." Excepting under very special conditions, when I only expect to pick birds off at close range, I like a 12-ga. spewing lots of lead. My favorite dove gun is a 12-ga. Parker, choked improved cylinder and full, an unusual boring, but ideal. The improved tube is dynamite up to 40 yards, the full choke stretches up to 50 and beyond—especially when I load the hulls with 1⅜ ounces of shot behind a relatively small amount of powder—18 grains of Red Dot. This is a standard velocity load, but numerous tests have proven that it produces the most uniform and dense patterns in my shotguns.



ON STAND, A dove hunter must remain alert, continually scanning just below the skyline where incoming targets are hard to see.

A few years ago I discovered I was shooting under birds a fair percentage of the time. It took some doing to figure out that a cheek pad needed to be added to the stock. Parkers were made with quite a bit of drop in the stock, and that lace-on cheek pad has now provided improved shotgun fit. If you are looking for still another added edge in improving your bag on doves, be certain that your gun fits, that the stock is not too long nor too short, etc. If your shotgun doesn't fit, get one that does or have your current smoothbore altered. Under most dove shooting conditions, use a 12-ga. with the chokes that suit the type of shooting you encounter. Use heavy shot loads, but ones that pattern uniformly and densely with your gun. Pay close attention to all these gunning elements, and you will probably add another dove or two on each good shooting trip. Lighter gauges kill countless doves every year, but if you're after a limit of birds, you'll have an edge with a 12-bore.

You are no doubt familiar with how crows use sentries. If you are a close observer of doves, you probably know that they, too, use observers around their food, grit and roost areas. In many cases these observation points are leafless dead snags. Whether they overlook a food or grit area, it is a sure bet that a high percentage of incoming doves will light on such a snag, perhaps looking the situation over to make sure everything is clear before lighting on the ground. At other times, several doves may be in a dead snag while numerous others feed or take on grit. It seems this is the way doves tell passersby, "Hey, Buddy, come on over here. Look at the gold mine we found."

Snags Ideal

At times these snags offer ideal places where you can bag a limit of doves. I'm certainly not advocating that you blast them after they light in the tree. That's just as inexcusable as shooting a bird on the ground. But they do provide challenging shooting when they are winging their way in to the snag, or if you've missed seeing them light, once they take off, usually dipping downward, they provide all the challenge that most shotgunners can stand. If you've already chosen your stand and notice that many birds are lighting in one particular snag, it sometimes pays to move to such a spot.

However, I'm usually opposed to moving once I've chosen a dove stand —especially if I've done so with a lot of forethought and pre-season scouting. It pays to have confidence in the stand you've chosen. If you are continually thinking about moving, eventually you *will* move. And when you do, the big flocks will probably pour in. There is no way you can shoot doves when you are in your car driving from one area to another.

One of the biggest problems dove hunters face is finding the birds once they are down. There is a subtle secret here (if you don't have a canine retriever). I make it a practice to set up my stand where the birds are easily seen once they crash down after being centered by a charge of shot. That's another good reason for

choosing a gravel area. Vegetation is usually sparse, thus making it easier to find your downed birds. Close-cropped hay and stubble fields make it fairly easy, too. But no matter what type of area you hunt, as soon as you pull the trigger and have a bird plummeting toward the earth, make a beeline for the spot. Mark it mentally and don't take your eyes from where the bird touched down—no matter how many other doves are flitting enticingly overhead at close range. One bird on the ground is worth a whole roost full in the air.

Actually, I've decided that from now on I'll be hunting doves *with* canine help. I've got a young retriever, and I expect him to provide lots of assistance and maybe even come up with a bird or two every good hunt that I wouldn't have found without him. With waterfowl limits at only a few birds a day, feeding a retriever all year might be questionable—unless you use the dog in the uplands, too. But with the generous limit of 12 doves per day, a retriever becomes a more sensible investment.

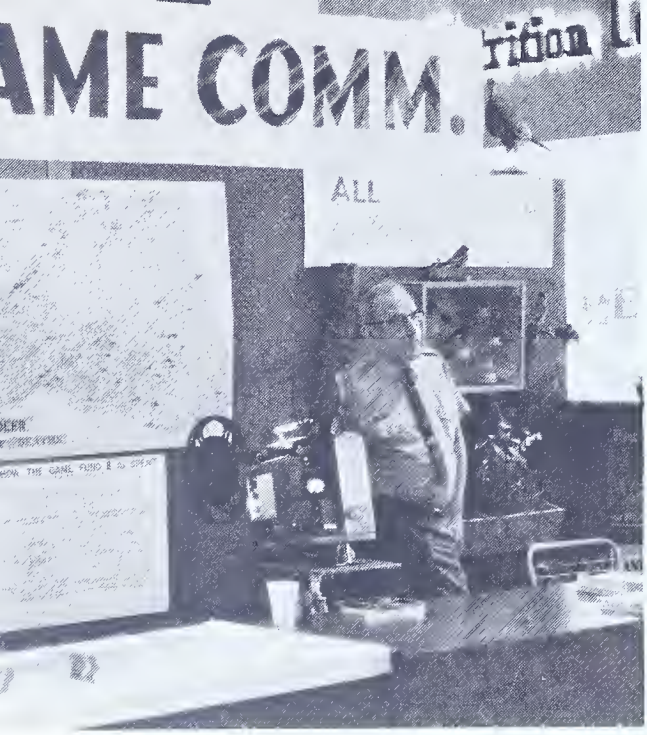
If you don't remain alert, it is going to cost you many birds over the course of a season. There is more to being alert than merely being ready to shoot at a second's notice. You must be looking for doves, always looking. Your gaze needs to be continually studying everything within view, your head pivoting back and forth in continual motion. You should watch closely below the skyline or horizon, not always at the sky itself. It's easy to pick out the birds once they are skylined; the tough ones to see are those below the skyline. Peripheral vision will usually spot the birds once they are outlined against a blue or cloudy sky, but it takes intense concentration to be continually looking below the tree line.

While maintaining this mental alertness and constant vigil to sight incoming birds, keep your shotgun in the ready position. If you watch closely, you'll see more birds at distant range, and fewer birds will get into and out of range without allowing you a shot. But you won't see every one; some will be noted only at the last second. If your shotgun is ready, you can get into action instantly.

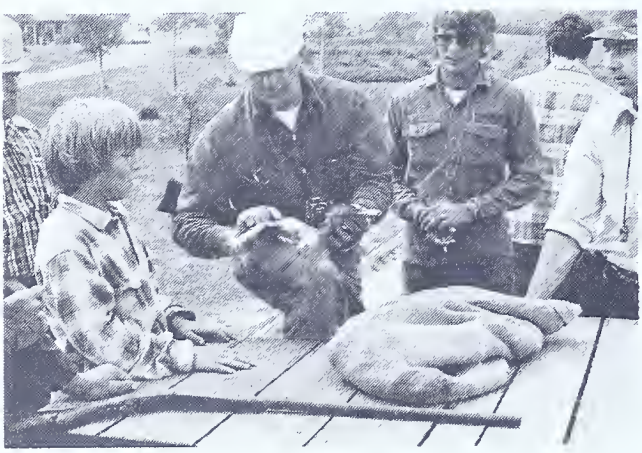
My final recommendation for putting more doves in your bag is to listen carefully. The primary wing feathers of doves make a unique twilling sound. If you are a dove hunter, you know what it sounds like. When you're using your eyes during that constant vigil to sight an incoming bird, make sure you're alert with your ears, too. When you look in the wrong direction, that telltale sound of twilling wings can still be heard and will often spell the difference between whether or not you have a chance for a shot.

The next time you go dove hunting, try to put it all together . . . the proper spot, inconspicuous clothing, concealment, an unobstructed view, the best shotgun and load, a smoothbore that fits, something to break up your outline, a good stand, a spot where finding downed birds is relatively easy, decoys, perhaps a retriever, and constantly looking and listening for the quarry. When you combine all these recommendations, it's sure to translate into improved success—hopefully a limit of birds—regularly!

The Roughshooter's Dog, by Michael Brander, St. Martin's Press, 175 Fifth Ave., New York City 10010, 198 pp. $7.95. In British parlance, practically all American small game and waterfowl shooting would be "roughshooting"; thus this book, which gives a highly experienced gunner's views on training pointing-retrieving dogs, is useful on this side of the Atlantic as well as being unusually interesting for the impressions it gives of hunting in the British Isles.



DEPUTY Earl Bowman shows Game Commission film to group on NHF Day, above. Below, field trial "gun" discusses gun and load with youngster.







AS LEGISLATORS, agency he
Shapp signs NHF Day procla

NHF

SATURDAY, SEPTEM
National Hunting &
Shapp signed the procla
ceremonies held at the
Over 20 million persons
grams throughout the
continues to grow. This
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to take part. Participat
Teenage America. NHF
can hunters and fishern
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ıers look on, Governor Milton



INSTRUCTION in breaking claybirds is helpful to young shooters.

1975

the date of the fourth annual lay. In July, Gov. Milton J. Pennsylvania sportsmen in nn Museum, in Harrisburg. ted to attend 3000-plus pro- e importance of NHF Day officially sanctioned program ir 7500 chapters are expected an official activity of Miss greatest opportunity Ameri- o present their activities to it a success!





GROUP BELOW watches and listens attentively as expert archer tells how modern bow differs from old English longbow, both in materials and design.



FIELD NOTES

Ancient Mallard

ERIE COUNTY — I received a bird band recovery report the other day concerning a mallard duck. The bird was a Game Commission mallard released in Erie County on July 7, 1959, when it was four weeks old. At the time of death, the bird was 15 years, 9 months old. According to the records, the oldest known wild mallard lived to be 15 years, 6 months old. It looks like the Pennsylvania bird set a new longevity record.—District Game Protector A. C. Martin, Erie.



Most Dogs Cooperative, Too

SCHUYLKILL COUNTY — Lately I've been presenting certificates of appreciation to Farm-Game Cooperators, and the response from these farmers has been very gratifying. Would you believe that I've only been bitten by one dog so far?—District Game Protector C. J. Harris, Pine Grove.

What Is So Rare . . .

CRAWFORD COUNTY — What a day . . . saw thousands of wild geese, hundreds of ducks, many species of shore birds, two bald eagles, and several hawks. All this and the fish were biting and most of the fishermen I checked were happy.—District Game Protector L. V. Haines, Linesville.

It's in the Bag

BRADFORD COUNTY — Deputy Emery Pease and I recently answered a beaver damage complaint. We had the surprisingly good luck to have both animals come out when the water went down, allowing us to catch them by hand. This impressed my wife so much that she told us she knew where there was a bear that needed catching. She shut up when we said we'd catch it if she would hold the bag.—District Game Protector A. D. Rockwell, Sayre.

The Preacher Did It

SCHUYLKILL COUNTY — They said there were baby squirrels in a closet at St. Peters Lutheran Church in Pine Grove. My investigation revealed a colony of flying squirrels. I showed the Rev. Matthews how to use a live trap, and he proceeded to trap and release ten of the little critters in six days using a few ounces of peanut butter for bait. I hereby nominate him for the "Honorary Trapper of the Year Award."—District Game Protector C. J. Harris, Pine Grove.

Rainy Range Rifling

LUZERNE COUNTY — For the first time in 27 years, it looked like the target shooting session would be rained out at the Stone Valley Conservation Camp. But the group attending on June 26 and 27 wanted no part of the cancellation and requested to do their shooting in spite of the rain. After Game Protector Lockerman gave them marksmanship instruction in the classroom, we went onto the range for some individual instruction. All campers fired the rifles—some for the first time in their lives—and did amazingly well despite the precipitation. They certainly were the most determined group of young people I've seen in a long while.—District Game Protector R. W. Nolf, Conyngham.

Low and Slow

TIOGA COUNTY — While vacationing in southern New Jersey, I noticed a wildlife problem that seemed a little different than those which we encounter in Pennsylvania. As we drive along Pennsylvania's highways, signs remind us that certain areas are deer crossings. Signs in southern New Jersey remind motorists that they are approaching a "Turtle Crossing."—District Game Protector C. L. Keller, Wellsboro.

Feathered Hat

LYCOMING COUNTY—As Deputy Marks drove home from work one evening, he spotted a deer standing along the highway. At first glance he thought it was a buck with antlers in velvet, but a closer look revealed that what had appeared to be antlers was actually a blackbird perched between the deer's ears.—District Game Protector W. L. Hutson, Muncy.



D. Boone Kilt a Bar

BRADFORD COUNTY — Last spring gobbler season, I took my sons Mark and Scott, and another boy, Craig Marvin, out turkey hunting. We didn't see or hear any birds, but we happened upon an injured 15-month-old bear. We caught the bear barehanded, and I later took it to the Wildlife Research Unit at Penn State. That was a hunting trip which I will never forget, and I'm sure the boys won't either. Now they feel they're in the same class as Daniel Boone, as they've won a rasslin' match with a live bear.—District Game Protector W. A. Bower, Troy.

Home Fires Burning

PERRY COUNTY—Rabbits chewed up all the peas; starlings and grackles have pulled the corn; mice are working on the tomatoes; cutworms are cutting the cabbage plants; Japanese beetles are defoliating the maple tree; chipmunks and squirrels are digging up the lawn; a woodchuck ate the tops of the red beets; and my wife is threatening to call the Division Supervisor if I don't do something. And you think you have problems!—District Game Protector L. L. Everett, Newport.

Vain Search

ADAMS COUNTY – I searched all the fields this month and found no notes, so I'll pass until next month and see what I find.–District Game Protector G. W. Becker, Gettysburg.



Highjumping Bruin

CLEARFIELD COUNTY – In June, State Trooper Cunningham was manning a radar unit on Route 322 near State Game Lands 33 when he observed a black bear crossing the highway. That in itself isn't unusual, as bears frequently cross this highway in the mountainous area west of Port Matilda. However, the method used in negotiating the deer fence on both sides of the road was something else. The bear approached the fence at a point where it leaned away from the roadway; then the bear jumped up, put its front feet on top of the fence, brought its back legs up too and then bounded off. The bear then walked across the road and continued on toward the other fence, which leaned in the direction the animal was moving. Here the bear leaped into the air, placed its legs over the top of the fence and did a complete somersault on the other side. Then it got to its feet and moved into the woods. Apparently that wasn't the bear's first trip across that section of highway.–District Game Protector J. R. Furlong, Ramey.

Recurring Dog Problem

ERIE/WARREN COUNTIES – So far this spring I have had many reports of dogs chasing deer. This is a year-round problem in most parts of the state. Two of the reports have come from persons who rescued one-to-two-week-old fawns from dogs. In each case, the dogs were biting at the young deer and the fawns were crying out in pain, which alerted the rescuers.–District Game Protector G. E. Gibson, Corry.

Where Was Mama?

CUMBERLAND COUNTY – John Powless of Carlisle had a group of local Girl Scouts for a weekend campout at his cabin in the Seven Mountains in Mifflin County. Early one morning while drinking his eye opener cup of coffee on the cabin porch, he heard a loud bleating which sounded like a lamb in distress. Next, he saw a young fawn stagger into the opening near the cabin with a gray fox in pursuit. He couldn't believe his eyes, but immediately ran toward the pair and frightened off the fox. The fawn, tongue hanging out, got a brief rest and then went back into the woods. This is the best authentic report I've ever had of a fox pursuing a fawn deer.–District Game Protector E. F. Utech, Boiling Springs.

Baleful Woodchuck

CLARION COUNTY – When baling hay on his farm, Deputy Hartzel and his son accidentally baled a half-grown woodchuck. The little chuck came out between two bales and was stunned or had the wind knocked out of him. It took about two minutes to revive him–and then they had one angry chuck to deal with!–District Game Protector J. G. Bowers, Knox.



Cool in the Pool

FULTON COUNTY — On several occasions, James Chestnut, who lives south of McConnelsburg, has returned home to find a groundhog swimming around in his pool. When caught in this act of trespass, the chuck scampers off to await his next opportunity for a swim.—District Game Protector C. E. Jarrett, McConnelsburg.

Ran Right Out of Skin

CLARION COUNTY — I was doing monthly reports after a busy day, when I got a call reporting a bear killed by a vehicle in the vicinity of Newmansville. I jumped into my car and picked up a deputy to accompany me. We arrived at the scene after 11 p.m. and backed up to the rock to load the bear. Upon alighting from the car we found a large black fur coat draped over the rock.—District Game Protector G. J. Couillard, Clarion.

Heavy Equipment Operators

YORK COUNTY — Eugene Blevins told me that he parked his new tractor for the night and when he came back the next day he found fox pups playing on it. They had chewed the rubber dust covers from the controls and had torn the seat apart.—District Game Protecor R. L. Yeakel, Red Lion.

Oil vs. Wildlife

FOREST COUNTY — Upon investigating an oil spill in Maple with Waterways Patrolman Kopena, I found a group of four young beavers that had apparently abandoned their home in the creek bank. I found oil scum over the entrance to their lodge. Later, they returned to their house and mother was caring for them by bringing twigs of aspen to the bank for them to eat.—District Game Protector A. N. Pedder, Marienville.

Sposed to Catch 'Em

ADAMS COUNTY — DGP Troutman and I demonstrated a turkey trapping net at Camp Nawakwa recently. One rocket delayed fire until the net came down and a boy asked the following question: "Is that third rocket supposed to kill the turkeys after they are in the net?" Well, not exactly.—District Game Protector G. W. Becker, Gettysburg.



Potato Pickers

BEDFORD COUNTY — Over the years men have trained animals to do much of their work. I was talking to a farmer the other day, and he suggested that raccoons could possibly be trained to pick potatoes. Apparently, coons dig the potatoes out of the ground but don't like them, so they won't eat them.—District Game Protector B. L. Warner, Bedford.

Turkey Success

BUTLER COUNTY — Since the inception of the wild turkey trap-and-transfer program (where the birds are trapped in regions where they're plentiful and transferred to marginal turkey range, including my district), Butler County's spring gobbler kill has quadrupled. Although we have brought wild-trapped turkeys into this area only since 1973, the turkey population is growing by leaps and bounds. We're now anxiously awaiting fall to see what kind of hunting success we'll have.—District Game Protector W. N. Weston, Boyers.

Let Georgeanne Do It

WASHINGTON COUNTY — Upon getting a call and arriving at the scene, I waited a few minutes, hoping one of the many passing motorists would stop and offer some assistance with putting the deer onto my rack. I was surprised that the only offer (and assistance) I received was from a local housewife. Shouldn't you men who stood and watched, and those of you who drove by, feel ashamed?—District Game Protector J. Kazakavage, Washington.



Local Litterbugs

BLAIR COUNTY — While on routine patrol of State Game Lands 147, I couldn't help but notice a lot of beer cans and rubbish along the road. When I stopped to pick up one can, I'd generally spot another. By the time I finished traveling a four-mile stretch, the trunk of my car was half full of litter—enough to almost fill a 55-gallon drum. If the littering doesn't stop in this area, I'm sure the county sportsmen won't object to closing this road.—District Game Protector D. D. Martin, Hollidaysburg.

Night Serenade

BUTLER COUNTY—Night sounds are certainly intriguing. A stranger to the out-of-doors could never imagine how many, how varied, and how beautiful these sounds really are. Listen on a still night when the sounds of the day have quieted. Or, better still, listen on a camping trip at evening's end, when the crackle of the fire has subsided and the coals are aglow. It adds to the pleasure if you are able to identify the different sounds.—District Game Protector W. N. Weston, Boyers.

First-Aided Possum?

YORK COUNTY — Deputy Robert M. Frederick, who is a trained first-aid attendant and ambulance driver, recently picked up an opossum that had been hit by a car. The animal had a large abdominal wound. A few sniffs of ether and a deft hand with needle and silk thread worked wonders, however, and the next morning the patient was up and around and discharged himself to a nearby woodlot.—District Game Protector R. L. Yeakel, Red Lion.

CONSERVATION NEWS

By Ted Godshall

29 Trainees Picked by Commission

THE PENNSYLVANIA Game Commission has announced the names of 29 men who have been selected for the 16th class of Game Conservation Officer trainees.

The 29 were chosen from about 1900 applicants after a series of written, oral and physical examinations. This is the largest response ever to Game Commission recruitment efforts for future game protectors.

This class of trainees will be the third largest group in the history of the school. Only the first class, with 35 enrolled in 1936, and the fourth class, with 30 enrolled in 1946, were larger.

Nine of the trainees have been serving Pennsylvania sportsmen as deputy game protectors; 17 of them are armed forces veterans, and 20 are married. The youngest is 22 and the oldest 33. Two have master's degrees; eight have bachelor's degrees; three have associate degrees; an additional 11 have formal education beyond the twelfth grade; while the remaining five have high school educations.

Members of the group will undergo approximately fifty weeks of intensive training at the Game Commission's training school, the Ross Leffler School of Conservation, located near Brockway in Jefferson County. Trainees reported to the school on July 14.

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Included in the school's curriculum are subjects such as wildlife management, public relations, game and fish laws, legal procedure, animal and bird identification, land management practices, etc.

In addition to the academic training, members of the class are assigned to work with field personnel during periods of peak activity. Following graduation next year, the trainees will be assigned to game protector or land manager positions throughout state.

Members of the new class and their hometowns are:

William P. Anderson, Tidioute; Gene W. Beaumont, Luxor; Elwood L. Camp Jr., Elysburg; William R. Dilling, York; Robert A. Fala, State College; Timothy C. Flanigan, Stoystown; Richie D. Hixson, West Sunbury; Leonard C. Hribar, Oakdale; Philip J. Lukish, Catasauqua; Robert G. MacWilliams, Ebensburg; Daniel E. Marks, Williamsport; Timothy A. Marks, Williamsport; George A. O'Hara, Vintondale; Donald C. Parr Jr., Edinboro; Michael R. Pratt, Pittsburgh; Donald B. Robertson, Saegertown; Michael W. Schmit, Schuylkill Haven; Alan C. Scott, Schuylkill Haven; Barry J. Seth, Butler; John A. Shutter Jr., Bethel; Charles Shrump, Natrona Heights; John G. Sickenberger, Greensburg; Steve A. Smithonic Jr., Exeter; Willis A. Sneath, Alexandria; John T. Strojan, Irwin; Warren Q. Stump Jr., Mifflintown; John Wasserman, Upper Black Eddy; William Wasserman, Kintnersville, and Frank S. Zalik, Corry.

PENNSYLVANIA GAME COMMISSION

SUMMARY

1975 SEASONS AND BAG LIMITS
DOVES, RAILS, GALLINULES, SNIPE, WOODCOCK

Species	Open Seasons		Daily Bag Limits	Maximum Possession Limits
	First Day	Last Day		
Doves	Sept. 1	Nov. 8	12	24
†Rails (Sora and Virginia)	Sept. 1	Nov. 8	25*	25*
Gallinules	Sept. 1	Nov. 8	15	30
Wilson's or Jacksnipe	Oct. 11	Nov. 29	8	16
Woodcock	Oct. 11	Nov. 29	5	10

†NO OPEN SEASON—King and Clapper Rails.
*Singly or in the aggregate of species.

SHOOTING HOURS

Doves—12 noon, prevailing time, to Sunset.
Rails, Gallinules, Snipe, Woodcock—One-half hour before Sunrise to Sunset (except on October 25 when the opening hour will be 9 a.m.).

MISCELLANEOUS REGULATIONS

FEDERAL MIGRATORY BIRD HUNTING STAMP ("DUCK" STAMP) *NOT REQUIRED* TO HUNT DOVES, RAILS, GALLINULES, SNIPE, WOODCOCK. BOW AND ARROW, SHOTGUN PLUGGED TO NO MORE THAN 3-SHELL CAPACITY ARE LEGAL; RIFLES AND PISTOLS ARE PROHIBITED. NO HUNTING ON SUNDAY.

Letters . . .

All letters to the Game Commission are answered if possible. The usual reply is a personal letter by an employe well qualified in the area in question. For subjects that bring in a lot of mail, form letters, fact sheets, or printed literature often serve as responses. These provide the fullest information at the least cost to the Commission and, ulimately, to the sportsman. However some writers persist in sending unsigned letters. Usually these letters complain about something and often the writers suggest that we publish them in GAME NEWS. We don't publish any letters—complimentary or complaining—in GAME NEWS, and since these are anonymous we cannot make a personal reply. Therefore, they are a waste of the writer's time, effort and money; they accomplish nothing. If you have a complaint, if you disagree with some aspect of Game Commission policy, if you want something explained—sign your letter and list your address. You'll get a reply. Even if you still disagree with us afterward (and it would be too much to expect everyone to fully agree), at least we'll be communicating. In the end, that leads to understanding, and perhaps even to progress.

Can't Breathe Under Water

Whales, like all other mammals, can drown if they get water in their lungs.

One Lazy Fella

The golden-mantled ground squirrel spends most of its life sleeping. Even after seven months of hibernation, it seldom rises for breakfast until well after sunrise.

GC-L-522-REV. (75)

COMMONWEALTH OF PENNSYLVANIA
HUNTING LICENSE APPLICATION

Certified Check or Money Order Required for Mail Orders

heck Type(s) Desired			Agent Write in Fees
esident Adult (17-64 yrs. of age)	$8.25	☐	
esident Junior (12-16 yrs. of age)	$5.25	☐	
esident Senior (65 years and older)	$5.25	☐	
on-Resident $40.35 ☐ Alien	$40.35	☐	
luzzle Loading	$3.25	☐	
rchery	$2.20	☐	
on-Resident 3-Day Reg. Shoot. Grounds alid from to only on Reg. Shoot. Grd.	$3.15	☐	
Resident Disabled War Veteran Claim No.	Free	☐	
Available only from County Treasurers	Postage		
	Total		

(Print Plainly)

AME _____
(First) (Middle) (Last) (Occupation)

egal Residence _____
(Street or R.F.D.) (County)

ity _____ State _____
(Zip Code)

ge _____ Color Hair _____ Color Eyes _____ Weight _____ Height _____

lace of Birth _____ Date of Birth _____
(Post Office) (State) (Nation) (Month) (Day) (Year)

ATURALIZATION PAPERS NO. _____ OR ALIEN REGISTRATION NO. _____
F NOT NATIVE BORN

BORN OF U.S. CITIZENS ON FOREIGN SOIL ☐

certify that above information is true and that my hunting privileges have not been revoked for this license year. Under 6 years of age (Resident or Non–Resident) have presented Hunter Safety Certificate _____

r prior hunting license _____

esident of Pennsylvania since (Signature of Applicant) (Date)

hereby certify that applicant has properly identified himself/herself and in my opinion is entitled to license(s) listed.

License No.) (Archery Lic. No.) (Muzzle Loading Lic. No.) (Signature of Issuing Agent)

gents Not Responsible for Licenses lost by Mailing.
lail Application and correct amount of fee (Include $.20 postage) to the PENNSYLVANIA GAME COMMISSION, ICENSE SECTION, HARRISBURG, PA. 17120, any Pennsylvania County Treasurer, or Approved Agent. *(DO NOT END STAMPS).* **Hunters under 16 years of age must present proof of Hunter Safety Training or prior hunting license. Preferably a photostatic copy). Non–Resident 3-day Regulated Shooting Grounds Licenses are not valid for any general mall or big game hunting. Mail orders for Resident Hunting Licenses must include positive proof of residency in this Commonwealth.**

LICENSE FEES ARE NOT REFUNDABLE

Waterfowl I.D. Booklet Given With Subscription

As long as our supply lasts, a copy of **Key to North American Waterfowl** will be given free with each 3-year subscription to GAME NEWS. This full-color, 32-page booklet identifies and gives much information on 62 species of ducks and geese. It is printed on "plastic" paper which makes it waterproof, impervious to oil and grease, and essentially tear-proof.

GAME NEWS

Enclosed find check or money order for $7.50 for a 3-year subscription to GAME NEWS. I understand I am to receive a free copy of **Key to North American Waterfowl** with this subscription.

☐ New ☐ Renewal

Key to North American Waterfowl may be purchased alone if desired. Price is $1.50, delivered. Check the following box if only this booklet is wanted. ☐

Name .....
(print plainly)

Address .....

City ..... State ..... Zip Code .....

Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pennsylvania 17120

EDITORIAL . . .

(Continued from Page 1)

so long. As mentioned, the accident occurred on July 19, but not until five days later, after an interested agency had begun to investigate, was it publicized except locally. On July 24 the New York *Daily News* published an account by Stewart Ain, who learned of it on the 23rd. Hopefully we'll be forgiven for wondering who had the clout (and self-interest?) to keep such a newsworthy story off the wires. Especially when everyone involved was an employee of one news medium or another. We can't help thinking what the newspaper and television coverage would have been like had a wolf bitten a baby girl at an NHF Day gathering of sportsmen, for instance.

—Bob Bell

Mostly Tailfeathers, by Gene Hill, Winchester Press, 460 Park Ave., NYC 10022, 162 pp., $8.95. Another three dozen-plus outdoor vignettes from the feller who gave us **The Hunter's Fireside Book,** including such gems as "How to Chew Tobacco," "Times Past on the Eastern Shore," and "Beware the Man with Twenty-three Guns." Delightful reading.

Home Book of Cooking Venison and Other Natural Meats, by Bradford Angier, Stackpole Books, Cameron & Kelker Streets, Harrisburg, Pa. 17105, 192 pp., $7.95. Angier has spent most of his life in the bush, taking most of his sustenance from it. In recent years he's turned out some two dozen books based on his experiences. The title tells what this latest one's about; it covers the subject with Angier's usual skill.

Wintering Deer vs. Snowmobiles

By C. W. Severinghaus and Benjamin F. Tullar



THE SNOWMOBILE presently being used is a terribly noisy machine. Snowmobiles coursing through a deer wintering area will cause deer to run away from the noise. Studies in Idaho (Audubon Magazine, January 1972) have shown deer will break into a "panicked run" while the snowmobile is still three-quarters of a mile distant and out of sight. At Cornell University, Dr. Aaron Moen has shown noise alone will harass deer and cause fright. In wintering areas, deer have been observed running with their tongues out after snowmobiles had been in a "deer yard" for less than half an hour.

A 112 lb. (51.2 Kg) deer at rest needs about 1323 calories in a 24-hour period (Silver at al., 1959). A 154 lb. (70 Kg) man at rest needs about 1850 calories per day (Guyton, 1959). A deer in winter would need about the same calories per day as a man. For man and deer, any kind of additional exercise requires more energy. For man, Arthur C. Guyton published the following table.

Energy Expenditure Per Hour During Various Types of Activity for a 70 Kg. Man (M. S. Rose)

Form of Activity	Calories Per Hour
Sleeping	65
Awake lying still	77
Sitting at rest	100
Standing relaxed	105
Dressing and undressing	118
Tailoring	135
Typewriting rapidly	140
"Light exercise"	170
Walking slowly (2.6 mph)	200
Carpentry, metal working, industrial painting	240
"Active exercise"	290
"Severe exercise"	450
Sawing wood	480
Swimming	500
Running (5.3 mph)	570
"Very severe exercise"	600
Walking very fast (5.3 mph)	650
Walking up stairs	1100

This article is reprinted from the June-July 1975 issue of New York State's "The Conservationist," and is used with permission.

From this table it is evident walking very fast requires about 6½ times more energy than sitting at rest, and walking up stairs requires 11 times more energy than sitting at rest. Assuming that calorie consumption for a deer is similar to that for a man, a deer harassed by a snowmobile and in a "panicked run" probably uses 6 to 11 times more energy than a deer at rest. What does this mean in terms of surviving the winter?

Not Enough Food

There is not enough food (energy) for all the deer to survive through most severe winter conditions. A severe winter will have weather conditions detrimental to deer for 16 to 20 weeks and starvation losses often will be 20 or more dead deer per square mile of wintering area. Death begins among fawns after six weeks of such winter conditions. A mild winter will have weather conditions detrimental to deer for about six weeks and virtually no deer will die of starvation.

Using the energy expenditures in the table, one can empirically describe a deer's daily activity and for that day calculate its energy (calorie) requirement. For example: bedded and resting—12 hrs. (1200 cal.), standing relaxed—6 hrs. (630 cal.), light exercise (feeding)—4 hrs. (680 cal.), running—2 hrs. (1140 cal.) =3650 calories.

Suppose then we alter this daily activity by having snowmobiles intermittently cruise through the deer's winter area for a total of four hours for the day. Such harassment will be labelled "panicked running" and we will assign an energy expenditure of 900 calories for each one hour (900 calories being about midway between 620—walking very fast, and 1100—walking up stairs). With this change in activity, the deer's energy requirements for a day might be as follows: at rest—12 hrs. (1200 cal.), panicked run—4 hrs. (3600 cal.), standing relaxed—2 hrs. (210 cal.), light exercise—4 hrs. (680 cal.), running—2 hrs. (1140 cal.)=6830 calories.

A week of activity without snowmobiles might require about 25,000 calories. (3650 cal. x 7). A week's energy requirement when harassed by snowmobiles on the weekend might be 32,000 calories. Thus energy (food) enough for two normal days was expended just escaping from snowmobiles on two weekend days. During a 20-week winter with harassment each weekend, food enough for 40 days of normal living would be wasted just escaping from snowmobiles.

A deer wintering area with enough food for 100 deer for 140 days would only have enough food for 78 deer that were harassed on weekends.

The shortage of food makes it impossible for all deer to survive a winter that has more than six weeks of deep snow. Whenever additional energy losses result from snowmobile courses through a deer's wintering area, four hours of intermittent harassment during a day can cause an energy expenditure equal to two days of usual living. In addition, the ability to survive repeated harassment from snowmobiles is not entirely dependent on securing food to replace that expended. The blood systems of a deer's heart and lungs are weakened by starvation and these will break down, resulting in the death of a deer long before starvation.

It is recognized that some deer actually follow snowmobile trails. However, snowmobile trails seldom run up the hardwood slopes through plentiful supplies of uneaten browse. As a consequence, snowmobile trails only permit deer to travel through areas to which they already have access and have already overbrowsed. It becomes obvious that the misuse of snowmobiles could cause an additional drain on the energy of deer which cannot be replaced because of the inadequate winter food supply.

Some readers will interpret this information as indicating that there is no justification for excluding snowmobiles from deer wintering areas during a mild winter. Unfortunately, there is no way of predicting in December or January whether the total winter will be mild, moderate, severe or very severe. Should snowmobiles be permitted during the early part of the winter, the energy drain can not be replaced until new abundant vegetation is available some time in June or July of the next summer. In areas where history has shown that the winter deer population requires more food than is available during any but the very mildest of winters, snowmobiles, during the entire winter season, should not be permitted. Certainly an energy expenditure in November or December or January, which can not be permanently replaced until the following summer, must be detrimental to the survival of individuals within that deer population. Because the severity of the winter can not be predicted, it is utterly ridiculous to allow snowmobiling early in the winter in the hope that the total winter will be mild. Because each and every winter has the potential of turning severe during February and March, and because the potential for a slow, cool, protracted spring exists, it is totally illogical to allow an energy drain that will cause death within a few weeks after the winter has turned severe.

It is quite obvious that in deer habitat where the winter range of the white-tailed deer occupies less than 25 percent of the total land area, snowmobiling can and should be permitted only in that 75 percent of the land area which will not adversely influence the total over-winter survival of the resident deer population.

Snowmobiles should not be allowed in any deer wintering areas and established trails should be kept at distances of at least one-half mile from these areas. Wildlife biologists and recreation people should work together in planning snowmobile trails and regulations.

MINI-EDITORIAL . . .

"The Guns of Autumn"

ANOTHER television "documentary" which doubtless will interest hunters is scheduled. In the words of the announcement, "The Guns of Autumn will be a CBS documentary about hunting, to be seen sometime around Labor Day [reportedly September 5]. 'You'll get an extraordinarily graphic look at what hunting really is,' says CBS News vice president Bill Leonard. 'It's 50 percent from the animal's point of view.' "

We've no idea what this will be like, but after decades of experience with the Disney films which try to present life from the animal's viewpoint, we can imagine what a CBS version will amount to. Disney at least had no hidden motive in his work. He just created entertainment in exchange for money. By contrast, most of today's television shows which mention hunting are basically propaganda—programs deliberately designed to achieve a desired effect by a skillful but warped presentation. Maybe this one will be different. We hope so.

At any rate, we suggest you watch The Guns of Autumn. If it's favorable to hunting, let the sponsors know. And if it's not favorable—or at least fair—tell 'em that too, in a polite, concise letter. A pile of letters from their product-buying public can be one of our most effective tools.—*Bob Bell*

Book Review . . .

Hunting the Long-Tailed Bird

At long last a book about hunting the ring-necked pheasant is available. Its title is *Hunting the Long-Tailed Bird,* and the author is Bob Bell, editor of GAME NEWS. I don't know anyone more qualified to sign his name to this manuscript. I have slogged through the mud, bulldozed into the greenbriers and stomped the cornfields with Bell on a hundred or more hunts. He's been there.

Bell's love for the most colorful of gamebirds shines on every page of this "hunting book." And that's just what it is . . . a hunting book for hunters. Unlike the many poetic ramblings on the ruffed grouse, this is meat and potatoes fare that the submerged two-thirds of U.S. hunters have been looking for. The minority who chase grouse, woodcock and other more genteel birds will perhaps elevate their noses when informed of this book, but a sampling of Bell's chapters on guns and ammo will quickly indicate that here is information even they can profit by. His irreverent thoughts about pheasant dogs will also raise hackles among the setter/pointer buffs, but the amens will be loud and clear among those who have hunted this great imported gamebird for a few seasons.

There will be other and perhaps more objective reviews of this book. I say that because I have a strong personal feeling for *Hunting the Long-Tailed Bird.* There are several photographs of my labrador, Samantha, in this profusely illustrated book, and my talented wife Sylvia snapped many of the pictures. Those two facts create button-popping pride. But there will be no bad reviews of this book. It's a first for the pheasant hunter and will undoubtedly take its place near the top of the how-to books.

Bell writes as he hunts—with gusto—but did not miss the opportunity for some thought-provoking philosophy. The final chapter, "Why I Hunt," should be required reading for hunter and non-hunter alike. Bell does not gloss over the fact that hunters do kill birds and animals, and the book does not end with the currently popular platitude that "just being outdoors is what it's all about." If you have ever chased ringnecks through a cornfield, you'll devour this book in one gulp. (*Hunting the Long-Tailed Bird,* by Bob Bell, Freshet Press, Rockville Centre, NY 11571, 212 pp., $14.95.) Signed copies available from Bell at 20 Winding Hill Dr., Mechanicsburg, Pa. 17055. —Jim Bashline

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THIS BROODER house is one of two identical ones recently completed at the Western Game Farm in Crawford County. Measuring 40x468 feet, it has a brooding capacity of 40,000 pheasant chicks.

Photo by Ted Godshall

HUNTER EDUCATION

By John C. Behel
PGC Hunter Education Coordinator

Hunter Education Promotes More Than Gun Safety For School Curriculum

Hunting attracts more and more people into the country each year. Its popularity is gaining, not waning. With the increase of numbers there is also a need for each and every hunter to be armed with more than a gun and ammunition—each should be armed with hunter education knowledge.

At Townville Elementary School, Crawford County, hunter education is taken very seriously. So seriously, that it has been built into the school curriculum during the past 12 years.

In 1962, two teachers, Al Whitlatch and Jack Randall, began instructing hunter education on Saturdays. The course has seen upward of 1200 youngsters successfully complete it since that time. In 1963, the course was formally adopted into the school curriculum. This made it mandatory for all sixth graders. Townville Elementary was the first school in Pennsylvania to do so.

The course, 10 sessions in five weeks during the fall, is still conducted by Al and Jack. They were joined four years ago by Ken Bender.

"Is there really a need for this?" was my first question. "Half the young people that take the course are girls. Very few of them will ever hunt. And half the boys will never become interested in hunting."

Mr. Whitlatch responded by saying, "The course serves a definite purpose. It's not designed just for potential hunters, although all Pennsylvania hunters under the age of 16 must have a certificate of competency. We cover more than the hunting aspect. Gun safety in the home is strongly stressed. Outdoor survival and conservation are two other subjects that we discuss."

"Respect of a firearm is the most important thing," Jack Randall mentioned. "We try to impress upon our young people what firearms can do. The use of film really helps in this aspect. There is gun demonstration by the instructors, but no gun use by the students."

As in every program there is a degree of effectiveness, or lack of it. This program speaks for itself. Of the 1200 youngsters that have gone through the course, only one accident can be directly traced to a youth having completed it. That's quite a record!

LARGE GROUP OF students listens intently to instructor during HE class held at PGC's Southwest Division office in Ligonier.





Much too soon September comes wingin' in . . .

Ducks, Anyone?

By Susan M. Pajak

. . . something unearthly grips my being as we slice the canoe through the murky swamp water . . . it's 5:30 in the morning . . . unadulterated goose pimples and a strange breathlessness dominate my body . . . the curls in my hair suddenly go limp . . .

. . . nothing is to be seen clearly, the sky is slit open merely an inch to expose its morning streak of gray . . . black-fingered shadows grab at me from the left and right as the canoe noses past downed trees and around stiff thickets . . .

. . . an explosion of ducks—or birds?—or something . . . erupts when the dappled canoe glides a bit too close to roosting places, and the resulting twin explosion of human nerves lifts the camo hat right off my head. I am shrouded in the feeling that if I weren't in Pennsylvania I would surely run into a gaping alligator at any moment.

Just such a duck hunting area is a place called Conneaut Swamp, at Custards, in Crawford County. Witness sometime the number of rubber booted duck hunters bobbing about with flashlights trying to get on the water quickly.

You will need a canoe, no doubt about that whatsoever, and knowing how to maneuver one at least a little counts. In first attempts at canoe handling no one expects you to "run the rapids" or make like an expert whitewater man; just moving it along nicely will suffice. Try not to slap the water with the paddle. If you've had no experience at all with one of these things, leave it alone . . . no need to have someone constantly hissing.

"What are you doing up there? You're heading straight into those thickets!"

"Maybe that's where I want to go."

GIRLS, GUNS, & GAME...

"Back it up! Back it up!"

"I'm trying to."

Remaining absolutely quiet and keeping your movements in the canoe to a minimum are a must. Keeping your head down and the muzzle of your shotgun pointed in a safe direction are essential rules. You load the shotguns with 4s, 5s or even 6s, reminding yourself to wait until the ducks are in close enough . . . 40 yards at most, 30 is better. No skybusting, please.

Standing in the canoe to get off a shot is dumb and might dump you into the water. I've witnessed the aftereffects of just such a dunking. Gun and all went down with the guy. His vest pockets were filled with shotshells . . . he wasted no time going straight down. Keep your shells in the boxes or whatever container on the floor of the canoe.

(In case you're wondering, the fellow surfaced in good condition, and a good deal wiser, though wetter.)

Wear hip boots or waders. Take along some extra clothes in case of rain. Hope for some clouds, as the ducks will fly lower. Use a duck call only if you know how. Practice at home first. If the neighbors complain about hearing ducks, tell 'em with a concerned seriousness that seems to judge their sanity that you didn't hear a thing. Continue to practice when they're not looking . . . or listening.

Refrain from shooting up most of your shotshells by twenty after seven in the morning and don't drink too much coffee . . . bathrooms in a swamp are hard to come by.

Duck season will be here soon. I know I'm a little early in writing about it but for me the wait is a throbbing torture. Can there be anything to compare to duck hunting? I fear not.

Ducks, anyone?

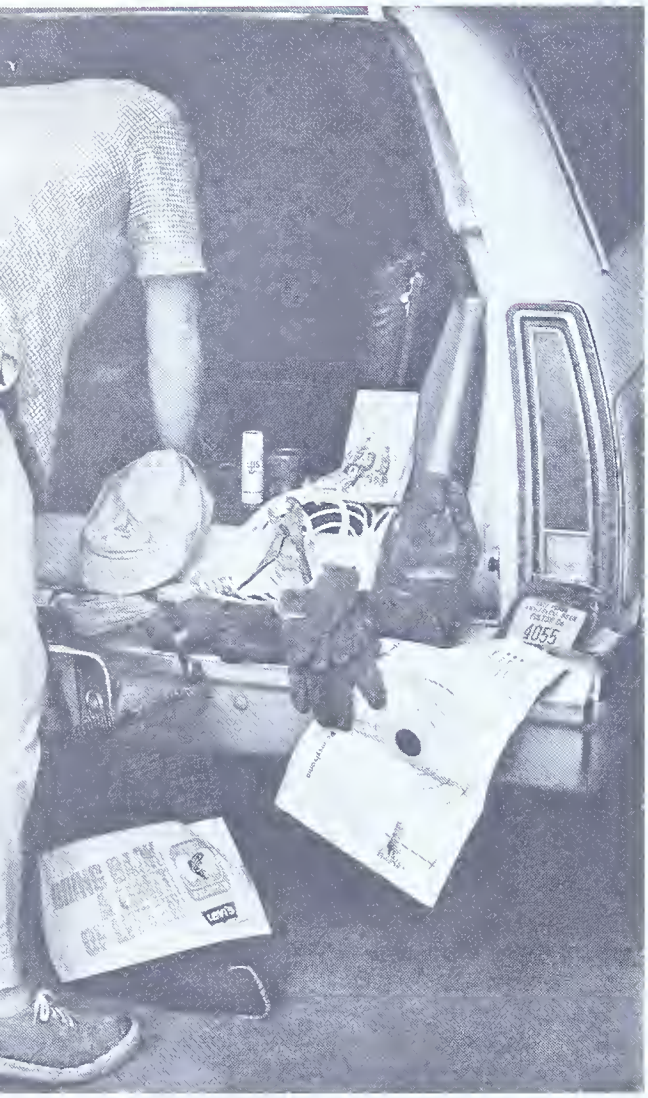
GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9x12 inches on 11x14 heavy, coated paper, without the GAME NEWS logo. The set includes Ned's woodcock from the April 1974 issue; the woodchuck from July 1974; the doves from September 1972, and the buck and doe from the December 1971 issue. These prints are not available individually. The price is $3 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.

The Sportsman's Car . . .

What's In Your Trunk?

By Les Rountree



ANYTHING AND EVERYTHING turns up in Rountree's trunk during annual house cleaning. That old GI entrenching tool has been worth its weight in gold on numerous occasions.

THE IDEAL arrangement for one who camps, hunts and fishes is to have a special vehicle for exactly those activities. Many outdoorsmen do have a second or bang-around auto. This can run the gamut from a deluxe palace on wheels costing as much as $30,000 to a 1955 jitney that features fenders of doubtful origin and a starter that only kicks over after a recitation of the Gettysburg Address.

If you do have a second car, chances are you've already got it loaded with assorted debris from the last 50 trips afield. If you're like most of us, the junk is never cleaned up or sorted. It just kind of grows until the car is traded or junked.

If you don't own a second car—and that includes many of us—the family bus has to double as pleasure and business transportation. The solution is to make a list of what you think you'll need and balance that against what you've needed in the past. Oh, sure, you can pack and repack for every little jaunt you'll take, but it's much easier to have a good assortment of staple, usable items in the car at all times. A spur of the moment hunting, fishing or camping trip may crop up at any time. It's a nice feeling to simply grab the gun, rod or hiking shoes and go right now. Saves valuable time, too.

Half a lifetime of rooting around in car trunks for this or that outdoor item has convinced me that I always have what I don't need and never have what I do need. At least it's the unprepared times that stick in my mind. But, giving myself a little credit, I frequently do have the item of the moment and it's fun to astound a traveling companion by being able to produce it.

For example, last year while trying to catch a glimpse of the migrating hawks along Kittatinny Ridge, we stumbled across an apple tree that was loaded with big juicy (but slightly tart) fruit. On the way back to the

car, my companion remarked that it sure would be nice if we had some salt for the apples. (Some apple eaters just love salt on sour apples.) With great flourish, I produced a salt shaker from my plastic dishpan of goodies. My friend was impressed and wanted to examine the dishpan more carefully, for earlier that year I had come up with a corkscrew when it was desparately needed, from that same cache.

What We Catalogued

Without any further explanation, here is what we catalogued that day: One bone-handled hunting knife, one tube of sunburn lotion, one can of insect repellent (full), one can of insect repellent (empty), one can of pineapple chunks, one half can of peanut butter (rancid), one glob of cracker crumbs (used to be crackers), three 12-ga. shotgun shells (one fired), four 20-ga. shotgun shells, five 16-ga. shotgun shells (odd, since I don't own a 16-ga. shotgun);

Two dog whistles, two salt shakers, one pepper shaker, Boy Scout mess kit, assorted matches, one box of trout flies, one tangle of monofilament fishing line, one corkscrew, a one-burner propane stove, three spark plugs (?), two flashlights, three pairs of gloves, one first aid kit, assorted loose bandaids;

Three copies of the October 1973 GAME NEWS, twelve feet of polypropolene rope, epoxy glue (three tubes), assorted bits of string, one copy of the 1972 fishing laws, three caps (one camouflage, one white, and one blaze orange), one jar of instant coffee, one box of sugar cubes, six plastic spoons, four ticket stubs from something, several unidentified scraps of paper with numbers and letters, and a cupful of just plain dirt.





WILDLIFE ARTIST Ned Smith leaves a pair of light rubber overshoes in his car, finds them handy when he wants to study something in muddy field, along creek, or wherever.

At one time or another, all of that junk was saved and lugged around for a very good reason . . . or so I thought at the time. Obviously, most of it will never be used during any one year, but it's a comforting thought to know that I've got all of those goodies in the trunk.

After searching for years and attempting to find the perfect carrying case, I've reached the conclusion that an inexpensive plastic dishpan (rectangle shape) is ideal for this purpose. Cost isn't much, junk inside stays in one place and the rattle level is extremely low. A metal box for car-carried goodies is okay from a durability standpoint, but assorted odds and ends will rattle around with annoying regularity. If you must use a metal box, line it with foam rubber or carpeting to reduce noise.

About once every two years (I can't remember to do it oftener than that), I cull through the carbox and toss the junk away. I usually start all over again with a freshly supplied box and in six months or so it looks just like



BOB PARLAMAN AND WIFE KAY enjoy lunch during an outing in northwestern Pennsylvania. Their station wagon is always full of goodies.

it did before I cleaned it up. At least I start off right.

For obvious reasons, a first-aid kit goes in first. The flashlights are next and the gloves are third. All automobiles should carry these three items. After this, the stocking of the car box becomes much more personal. Since I like to cook occasionally while ramming about Pennsylvania, the Boy Scout cooking kit goes in. This could easily be a collection of inexpensive cooking ware from the local department store. A frying pan, small pot and a tin cup will do nicely. Even if you don't choose to carry cooking gear with you at all times, a tin cup is a wonderful thing to have along. A cold roadside spring is always a traffic stopper and nothing enhances the taste of spring water like a tin cup. While the throwaway styrofoam cups suit some people just fine, try a drink from a tin cup next time. I'll bet you'll agree it tastes better that way. Besides, plastic cups just create more garbage.

A few cans of things you like to eat as snacks are always handy. Dry packaged foods don't last long when beaten around in a car trunk or the stowage compartment of a station wagon, but canned goods last almost indefinitely if they are not pierced.

As a quick thirst quencher and energy producer, nothing beats a can of fruit. I like pineapple, but peaches, pears and fruit cocktail are very acceptable. The small, single portion cans of beans, hash, chili and spaghetti are welcome additions on a cool day. The new heat-and-eat combinations that are being sold in sporting goods stores these days are fine emergency packs.

A single burner propane stove will do a good job of heating food. When a stove is not carried, an opened can can be heated by balancing it on the engine manifold of your car (while you're parked, of course). Don't put an unopened can on the manifold and drive around for an hour. Pressure may build up and explode the can, and the resulting mess will last the life of the car.

Salt and pepper shakers make sense in the goodies box, and so do extra matches. Rope can come in handy and I wouldn't be without a sharp knife. Depending on your favorite outdoor pursuits, the contents of your trunk will vary. Like most other outdoor paraphernalia, the selection be-

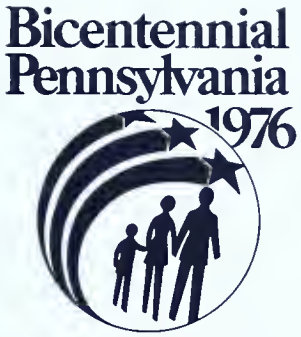
comes highly personal. Fishermen will have odds and ends that wouldn't mean a thing to bird watchers. The dog trainer has equipment that would baffle the casual Sunday tripper. A traveling gourmet will stock his car like a mobile restaurant. Freedom of choice is the answer.

But some discipline is in order, or in no time at all the trunk will start to look like the leftovers from a church rummage sale. Stack everything in a pile and discard the things that you haven't used in five years. Chances are you'll never need them. Pay particular attention to the first-aid kit. If the bandaids are dirty and the antiseptic bottle is leaking, it's time to replace them. Check the flashlight batteries and even if they still flicker, replace them if they are a year old. Nothing is more worthless than a flashlight that doesn't shine.

Never Store Film in Trunk

Never, under any circumstances, carry camera film in the trunk for more than a few hours. High temperatures destroy film quicker than anything else. Glove compartments are almost as bad. Carry your film in an insulated box . . . under the seat. Don't expose it to sun any more than necessary. If you must carry extra film at all times, buy a small ice chest that features good insulation. Film should be kept cool or at least below 65 degrees.

If you own a dog and hunt with him or take him with you on hiking trips, be sure to carry something for him to eat. Dogs are just like people; when they spend extra hours in the field, they become hungry and thirsty. If there is no stream in the area, carry some extra water for the dog. A canteen is a good idea. Fill it up at the nearest spring or carry the water from your home base. Take some for the dog and some for you.



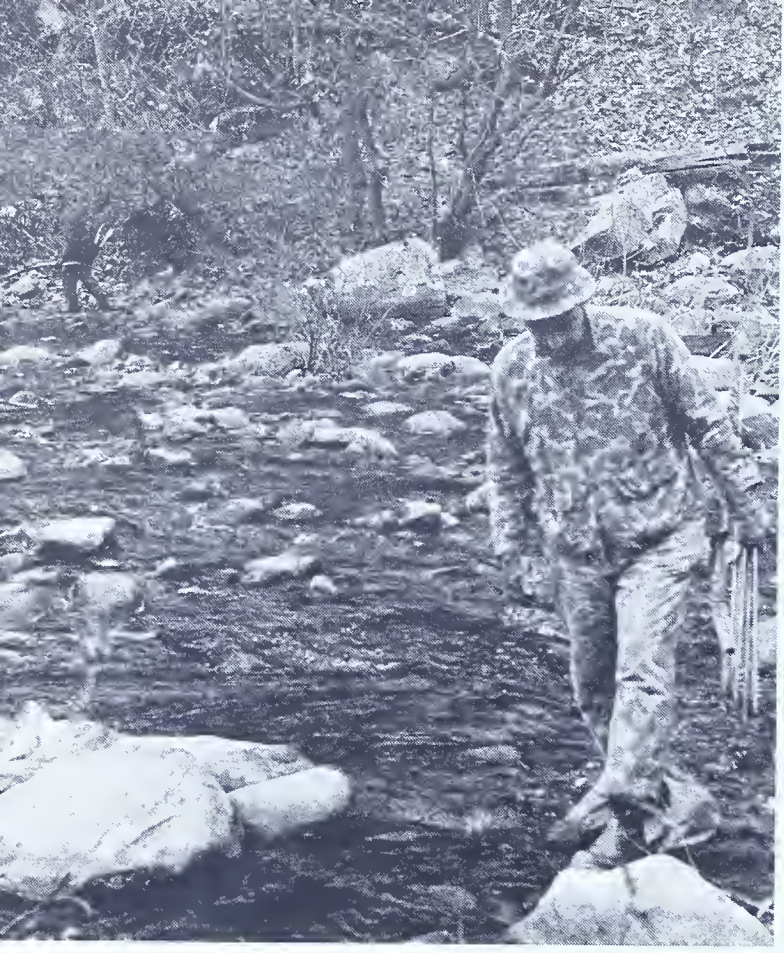
So your children can tell their children.

If you are hunting or fishing during hot weather, it's a good plan to lug a chest-type cooler along. Put some ice in it before you leave home and stick in a cold drink or two. A welcome swallow at break time is a nice touch. In addition to carrying drinks, the cooler will take care of game and fish. If the air temperature is approaching 70°, it will be at least 10 degrees hotter in a car trunk. Put those birds and fish in the cooler . . . they'll taste better when you eat them later.

You may discover that you'll want to carry more than one dishpan of goodies. Great, that's your decision. If you are a one-car family, the pans can easily be taken out when packing the family off for a weekend at Uncle Harry's. Then they can be replaced when that trip is over. All the stuff is there in a handy receptacle or two, and you don't have to root around through the trunk and under the seats to locate that "must have" item.

Your non-outdoor friends will naturally think you are nuts when they catch a glimpse of the traveling gear. Let 'em. You'll have the last laugh when they ask for a salt shaker, cup or plastic spoon. "Just happen to have that along," you can proudly say.

(Don't share your can of pineapple with them, though . . . that's for an emergency only.)



Setting the Scene

By Keith C. Schuyler

Photos from the Author

ANY TIME there is a hazard involved, arrows should be kept in a covered quiver. A fall on a slippery rock could drive a broadhead through you.

WITH THE FIRST day of the bow hunting season for deer but weeks away, there is still time to consider a number of aspects to such hunting that have importance to all bow hunters.

As a more or less trivial example, there is the matter of the title given to those who hunt with the bow. A dictionary is no help. The old sport is too new to have been considered by any of the lexicographers to my knowledge as of this date. According to a bulletin of the National Rifle Association, which has adopted bow hunting, or bowhunting, as another shooting sport, one Roy Case coined the word *"bowhunting"* back in 1930.

Be that as it may, I don't ever recall seeing the word *gun hunter* written as a composite. The distinction became important in setting up the title of my last book, *Bow Hunting for Big Game*, (Stackpole, 1974), since there were no positive guidelines. But, airplane pilot and ship pilot are written as two words; truck driver, tractor driver, automobile driver. Also, fly fisherman and bait fisherman! The activity is quite similar, but the *means* to the activity is quite different in each case. Until someone comes up with a better reason, this will be for bow hunters about bow hunting. (No fair checking back issues for typographical errors!)

In a more serious and practical vein, there are considerations of safety, courtesy, companionship and concern in this great sport of bow hunting. We're going to take a somewhat brief look at each as we set our sights on another great bow hunting season in Pennsylvania.

Since safety is most important, it takes precedence in this overall glance at what is up ahead for the 1975-76 seasons.

The record is excellent, but certain

practices engaged in by bow hunters dot the record in blood, and most of them are completely avoidable. Purely accidental injuries are so small a part of the total number of mishaps that elimination of certain hazards could conceivably produce a season free of any.

In this day of Nadarism and governmental concern for every move we make, some of the arrow quivers on the market violate every rule of common sense and concern. The traditional back quiver, in which the presumably sharp broadhead points of the arrows were automatically covered, presented no problems. Both the archer and his companions were protected when the arrow was in the quiver. This one came to us from every civilized country as well as the native Indians.

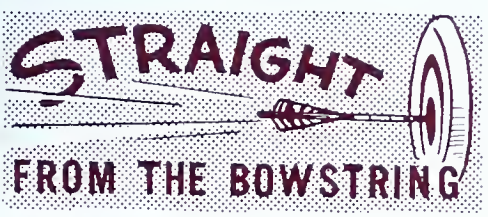
Belt, or side, quivers offered the same protection from pointed field and target heads. In the use of either type quiver, it was only when the arrow was in actual play that it presented any hazard to anyone.

Then came the bow quiver. This was a development that accompanied the new accent upon hunting with the bow as well as the construction of bows with a riser section to which the quiver could be attached. It was an excellent innovation. It minimizes the motion required to get an arrow from the quiver to the bow, important when hunting wary big game. Further, it reduces the need for an auxiliary item of tackle while adding desired weight to the bow itself for better stability in shooting.

Unfortunately, in the mass market concept, cheap bow quivers which would hold arrows in sufficient number but offered no protection against the sharp broadheads flooded the archery market. There have been numerous mishaps. Some inventive types even made their own unprotected quivers by utilizing such things as shower sandals or soft rubber sections.

Surely we have advanced enough in bow hunting that there is no longer any excuse for exposed arrowheads. In this opinion, legislation is needed at the level of consumer protection to prevent the unwary from hurting themselves or each other. The experienced bow hunter wouldn't ever consider using one of the dangerous quivers.

All bow quivers should have a guard of cover which will prevent a broadhead from cutting or jabbing anything when it is carried on the person or equipment!



Use Rope

Tree climbing, either with or without one of the sophisticated portable stands, cannot be made hazard free. As a minimum, a cord or rope should be carried to life the bow and/or quiver *after* ascent is made.

Except on a deliberate stalk, when each step is calculated, or game is in sight or momentarily anticipated, the arrow should not be on the bow. If the situation is such that an arrow is needed at the ready, it should be held in the draw fingers. The shaft should be grasped close to the head so that it can be controlled in the event of a fall. When using a bow quiver, there is seldom any need to have an arrow on the bow except when shooting because of the slight motion needed to set one on the string.

As every bow hunter should know, a broadhead should be kept nearly razor sharp. In fact, some heads incorporate razor blades for the cutting edge. No sensible person would be careless with a straight razor; the same should hold true with a broadhead.

There was a time when courtesy was as natural in bow hunting as in any activity where sportsmanship is a



WHEN TWO bow hunters meet in the woods, it's only common courtesy—as well as common sense—to talk in whispers so game will not be alarmed.

necessary part of the game. With archery tackle available during the early resurgence of hunting with the bow back in the '30s, a fellow had to have something special going for him to even attempt to take big game with the bow. Fortunately, much better tackle is available today; unfortunately, far too many think that better tackle makes hunting easy. Those who frequent the discount houses and get their bow hunting training from *Tales of Robin Hood* are seldom in the forefront among archery hunters.

This is not to say that organized archery guarantees to produce sportsmen, but it is surely a step in the right direction.

Association with others of a like mind is apt to improve a person's outlook toward any sport. One doesn't get very far in any group without developing a regard for the other guy. With the woods somewhat crowded today compared to bow hunting of even twenty years ago, the need for courtesy is much more evident.

For example, if a hunter comes upon another, a nod should be sufficient greeting before quietly getting out of the area. If the intruder is lost or needs information, he should walk right up to the other and whisper his request. The poor guy may have been standing at that spot for hours waiting for a shot.

The absolutely worst thing to do is beller out, "Have you seen anything?" Obviously, after that, the patient hunter isn't likely to see anything.

Another fault, all too common, is for someone to start yelling for his buddy about fifteen minutes before the end of the shooting time. This guarantees that anyone else in the area won't get that shot they may have waited for since the last coffee break.

Other clowns like to use the air horn to alert their "buddies" that they have had it for the day. This one can foul up shooting for literally hundreds of yards in every direction. A deer may only stop to listen, but that hesitation may mean frustration for some hunter who is within seconds of a trophy. A deer, even mildly alerted, may stay put for a long time or drift another direction just to be on the safe side.

Probably the most discourteous act, when hunting with a group, is to take off for home without informing anyone in the crowd of this intention. Everybody else in the gang must worry out the balance of the hunt wondering if this clod is lost, hurt, or both.

Smarter than Captain?

And, there are those who feel they are much smarter than the captain of a drive or a stand, and they choose their own direction or position. If the leader isn't competent, this fact will soon become evident and a change can be made at the appropriate time. However, unless others follow his directions to the letter, it never will be known whether he knows his business or simply picked the wrong companions for the hunt.

If you haven't come across some or all of the previous situations, you just haven't been bow hunting very long. Many reading this could add their own pet aggravations to the list. The

important thing here is to note that none of these actions are necessary. Common courtesy will provide the alternative almost every time.

The one exception, and this is important to record, is the novice hunter who commits one or more of these offenses in all innocence. He should have the facts of life gently but firmly pointed out to him. If he still doesn't catch on, present him with a copy of the latest television guide or a course in needlepoint. He'll never make a bow hunter.

Not a Question of Fear

Although there are those, including this writer, who just like to get out alone on occasion, these excursions should best be confined to fairly well-known areas and limited lengths of time. It isn't a question of fear for personal safety; rather it is simple consideration for those who might be concerned about your safe return—like mothers, wives, the National Guard, or the State Police. If you don't show up when expected, the search then can be concentrated on a known area.

In all cases, someone should know where you are going and have a reasonable span of time in which you might be expected back.

The alternative is to hunt with a companion or companions.

There are many plus values to going hunting with others even if you plan to hunt alone within a given area. Those who are constantly antisocial are looked upon with a certain suspicion by their fellows. Of course, some are so located geographically that they have difficulty finding company, but most of us can dig up a hunting companion.

Although getting lost is a minor consideration in most areas, and the average hunter can handle himself under the average circumstance, having someone along on the hunt minimizes the possibility as well as the hazard. This becomes even more important in winter months. A broken ankle or leg, or an arrow injury, can become an extreme emergency under some conditions.



HUNTING ALONE has its special compensations, but it's safer to at least travel to and from the area with a companion. And always make sure that someone knows approximately where you'll be.

In a recent talk with C. A. (Chuck) Saunders, who heads a large archery supply company in Nebraska, he told of a personal experience some years ago in which he narrowly escaped death from an arrow wound. It was a simple stumble that jabbed a broadhead through his leg and out the femoral artery shortly after he had left his companions on a hunt. He was able to get back to them with difficulty and was taken to medical help for repairs. Although everything worked out satisfactorily, the injury would have had extremely serious implications had he been hunting alone.

Pennsylvania's one bow hunting fatality resulted from a similar injury when the hunter dropped from a tree onto an upright arrow that had stuck nock first into the ground. Had a companion been available, the incident might have had a less serious outcome.

Aside from all this, the joys of sharing the experience add much to the hunt for those who enjoy compan-

ionship if only for the trip to and from the chosen area. If the companion is a youngster or a newcomer to the sport, your help and guidance can have special significance. If one or a couple of hunters are successful, ready assistance in getting the animal to the car has practical value.

When hunting with a large group to set up drives to improve the individual chance for success, there is a real test of companionship and sociability. It is difficult to have all good hunters even though each may be a pleasant companion under almost any other circumstances. Sometimes it takes a bit of patience and understanding to help those who need this experience to develop their own skills and woodsmanship.

The Ultimate Dimension

This is not to disparage the time-honored test of going it alone. Bow hunting is then bared to the ultimate dimension of man versus animal. There will always be that challenge wherein the hunter stands alone against the wisdom of nature with only a powered string and a sharpened shaft as his advantage. He must succeed or fail entirely upon his skill as the human predator in a scene little removed from the timberline or the grassland of thousands of years in the past. Working for or against him are the vagaries of wind and weather, the instincts of the quarry, the simple snap of a twig, or the unknowing rustle of leaves by a squirrel busy in its own world.

But those who have known the solitary stance and have tasted of its pure enjoyment may find a special pleasure in introducing a companion to this part of the scene. Each might then go it alone but carry with him the comfort of a friend with whom he can later communicate the experience.

The hunter who wears two hats for hunting is today a marked man. He has been marked by a mixture of concerned citizens, sentimentalists, and joiners who don't know what it is all about. This conglomerate is a small fraction of the number who actually do hunt and pay for the support of their quarry as well as countless creatures that bring pleasure to all. But this small number directs its negative effort to the segment of nonhunters which is many times the total of both hunters and the group which opposes this activity.

When the hunter wears his gunning hat, he has his special problem of yet another group against guns. When he changes his hat to hunt with the bow, he picks up another group of anti's who wait in the wings to bring charges of cruelty.
ramifications of these attacks against what we have always considered to be our birthright, we might properly condense them all into an individual need to be concerned. No longer can we take it for granted that our outdoor sports are guaranteed for ourselves and posterity. We must be willing to fight back through the courts and support those organizations which are structured to carry our case as far as needed to preserve our heritage.

Even more important, we must be careful to do nothing to provide ammunition for those who oppose our way of recreational life.

New Program

A program has been instituted by the aforementioned Chuck Saunders which deserves attention. "Bow Hunters Who Care" is a non-profit program designed to "endorse the concepts of true archery sportsmanship, including such aspects as proper hunting practices, environmental protection, establishment of good relationships with owners of hunting lands and communication with gun hunters." Further information is available from Saunders Archery Co., PO Box 467, Columbus, Neb. 68601.

In each of the important facets of the bow hunting sport presented here is the obvious reminder that to enjoy the privilege we must deserve it. Or we will lose it!

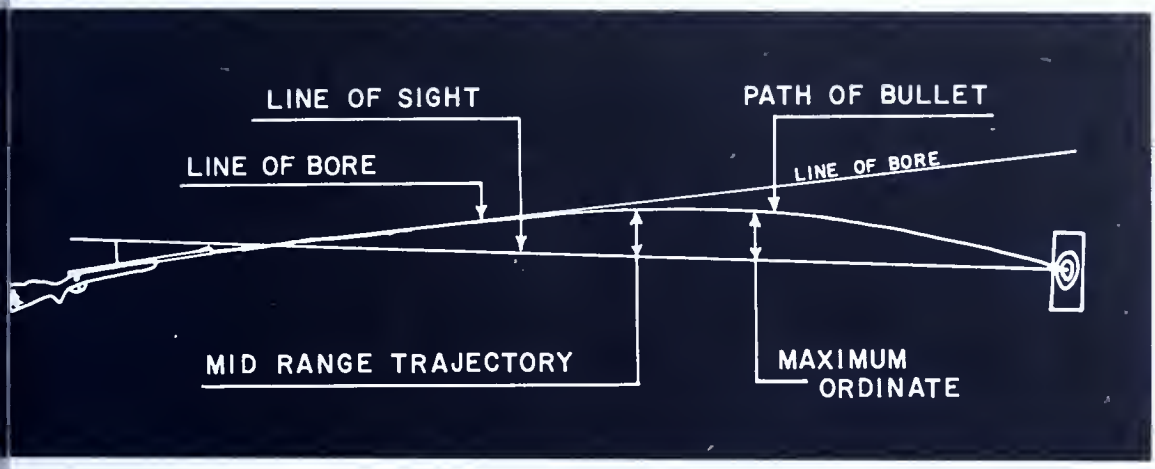


Diagram by Ross Blosser

A mystery that still plagues many of today's hunters is . . .

The Flight of the Bullet

By Don Lewis
Photos by Helen Lewis

LONG BEFORE I reached the steps of the local grocery store, I heard sounds of a heated argument. Electricity hadn't come to my neighborhood yet, and I hurried through the winter darkness to get inside. By the time I removed my jacket and got a seat close to the pot-bellied stove, the argument had risen to a crescendo pitch.

"Makes no difference what you've heard, a bullet with a lot of speed travels high for the first hundred yards or so. Why, even with my 30-40 Krag, I have to hold real low on short shots when using the 150-grain bullet. That's why I always stick with the 220-grain since I don't have to make any sight changes. The heavy 220-grain bullet stays right on the muzzle line."

"I don't think that's possible. My physics teacher claims it's against the law of gravity for a bullet to rise of its own accord. If he's right, it's impossible for any bullet to rise above the line of bore," the young high school student cut in.

"Line of bore or whatever fancy term you want to use means nothing, and that statement just proves your physics teacher never hunted or fired a gun. The real proof is with the fast shooting 250-3000 Savage. Ain't a hunter in the woods that doesn't know that little speedster isn't any good for short shots since its bullet goes flyin' high for quite a distance," flipped back the veteran hunter.

"I still think my physics teacher was right about the law of gravity. I'm not the hunter you are, but I think it makes sense a bullet can't rise just because it's going real fast . . ."

Well, no need to describe the tirade this remark brought, but the older man claimed 40 years' hunting experience and a score or more bucks to his credit. Either his age or years of experience silenced the young boy, and it did seem the veteran had won as he picked up his purchases and threw a contemptuous glare at the group as he slammed out into the night.

A heavy silence followed his departure, and it was plain to see sentiment ran against the youngster for doubting the word of the silver-haired hunter. As far as I was concerned, I was sticking with the veteran. I had listened many times to incredible stories about fast shooting bullets like the 250-3000, and at the tender age of 16 my mind was made up the physics teacher didn't know a thing about shooting. Like the young boy in the argument, I had only very limited big game experience, but I had sense enough, or so I thought, to believe facts that came from the lips of a hunter with nearly a lifetime of hunting behind him.

It took a few years and some exposure to the laws of physics for me to realize the teacher didn't have to be a hunter or know how to fire a gun to make a positive statement pertaining to the law of gravity. Although the veteran hunter was wrong in his thinking, I honestly believe he was confused about the "line of sight" and the "line of bore." His belief that the bullet traveled high after leaving the muzzle was correct in regard to the sights, but due to the law of gravity, it never rose above the bore line. This misunderstanding has caused some rather heated arguments.

The high speed of the old Savage 250-3000 was looked on disdainfully by most 30-30, 35 Remington and 32-20 owners. Heavy vegetation and dense laurel thickets were the favorite hunting grounds of the post-World War I hunters, and high speed was of little importance for the 40- to 75-yard shots of that era. Low velocity cartridges with heavy bullets were the order of that day for point-blank ranges. The idea of 250-yard shots was far from the minds of hunters who carried the brush-busting guns of the '20s and '30s.

Sometimes I think the arc of the bullet is one of the most misunderstood aspects in the realm of shooting. It's not difficult to understand why. The bullet is seldom seen, and it's impossible for the naked eye to trace its flight. Consequently, there is plenty of room for conjecture and old myths. About all we can rely upon is to understand the law of gravity and realize this is a constant, never changing force that subjects the speeding bullet to the same downward pull as it does a falling apple. Nothing heavier than air can rise of its own accord, and this goes for the unseen bullet.

A bullet fired parallel to the ground begins to fall the instant it's free

WHEN WATCHING AN OPEN HILLSIDE, power line right-of-way, or whatever, shots tend to be long and knowing precise path of your bullet can mean the difference between a clean kill and a miss.



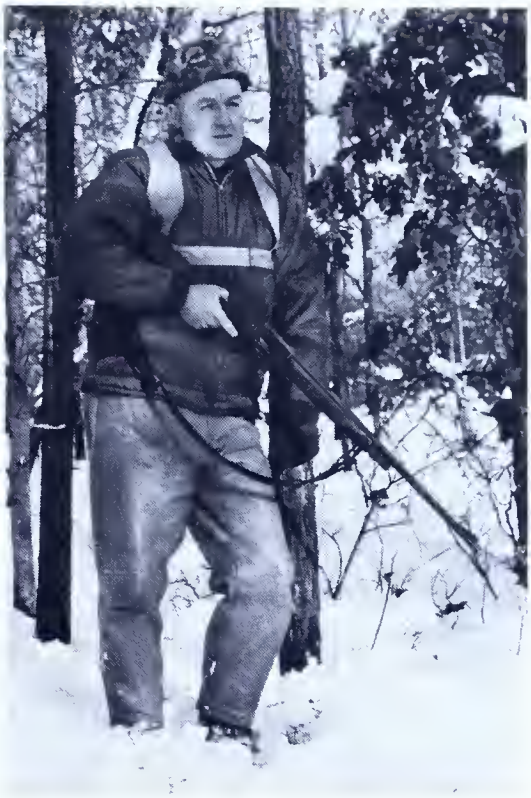
from the confines of the muzzle. Its speed has nothing to do with whether it falls a little or a lot, but the quicker it gets to the target, the less time spent in the pull of gravity. Take for instance the 150-grain 30-30 slug in front of 33 grains of 4064 powder. This leaves the muzzle at around 2150 fps, while the same weight slug being pushed with 53 grains of 4064 from the '06 is traveling just under 3000 fps according to Speer's No. 7 manual. That's a difference of nearly 850 fps. On a 75-yard shot, there would be little difference in the bullets' paths, but over 300 yards the faster bullet would have a much lower arc of trajectory.

Misunderstanding

As I said earlier, the confusion stems from a misunderstanding between the "line of sight" and the "line of bore." The line of sight is always the straight line from the eye through the sights to the target. The line of bore is also a straight line from the chamber through the bore to infinity. As you can see, these two lines are always straight, but it's common to confuse the bullet's path, which is always a curved line, with the line of bore.

The path of a bullet is a down-curving line from the rifle's muzzle; it falls faster as the bullet moves forward. It's easy to see that if the sights were aligned parallel with the bore line, it would be impossible for them to ever intersect the path of the bullet which is falling below the line of bore all the time. If this could not be remedied, the hunter would always have to aim somewhere above the target and just hope. This might not be much of a problem on a very short shot, but it would be impossible at the longer ranges.

Fortunately, this problem can be overcome by adjusting the sights so the line of sight intersects the bore line instead of being parallel to it. What actually happens where the sights are "raised" or adjusted for more elevation is the rifle's muzzle is tipped upward when the sights are aligned on the target. This causes the bullet to pass through the line of sight a short distance in front of the muzzle, travel in a curved line above it, and then fall through it at whatever distance the rifle is sighted in for. Note that the bullet never rises above the bore line. In reality, the rifle is sighted in for two distances, one a few yards—perhaps 20 or 25—in front of the muzzle, and again where the bullet passes through the line of sight the second time.



EVEN IN brush country, it helps to know path of bullet in relation to line of sight, so you can pick a small "tunnel" to shoot through when necessary.

By adjusting the sights for the proper distance, the shooter can hold right on the target, but the bore line points above the center of the target. This slight upward tipping of the muzzle starts the bullet toward the target with just enough angle to compensate for the amount of down pull from the law of gravity. Those familiar with artillery or naval guns know the great angle at which the big shells

are started on their journey to a distant target.

I'm asked many times each year for information pertaining to the trajectories of certain load/bullet combinations. This is difficult to do. The best data comes from shooting these loads at hundred-yard intervals to obtain actual results. There's an old belief it's better to sight a rifle "dead on" at 50 yards and then use "Kentucky windage" for longer shots. I have never subscribed to the idea of zeroing in a big game rifle at 50 yards. In fact, there's no point in it. On most calibers, the trajectory arc is very small up to 100 yards, and any rifle sighted for that distance will practically be sighted in for 50 yards.

Another idea that doesn't appeal to me is sighting in at 25 yards or so in front of the muzzle. I realize I just explained how the bullet passed through the line of sight a few yards in front of the muzzle, but unless the exact distance is known and very tight groups are placed exactly where wanted at the short range, the rifle could be off a great deal at longer distances. This may shake the timbers of those who have full faith in this method, but from personal experiences, I never had much luck. If your bullets are off the paper at 100 yards, though, it's a good idea to shoot at 25 yards to get a rough zero quickly.

My best results have come from the benchrest at 100 yards. Also, I'm a firm believer in sighting in most big game rifles a few inches high at that distance. With the open terrain available today, 250-yard shots are becoming common, and a hunter using a rifle sighted for 100 yards has a very difficult shot at long range. I described some months back how I got a nice buck at 230 yards. I was using the Ruger No. 1 Single Shot in the 7mm Remington Magnum that was sighted in 1¾" high at 100 yards. This made the 140-grain slug ¾" high at 50, 2" high at 150, and just over 1" at 200, and dead on at 240 yards. In this particular instance, all I had to do was hold exactly where I wanted to hit.

From a lot of shooting experience, I've learned a belief exists the bullet goes out to 100 yards and then begins to fall. Using the trajectory of the

A SCOPE IS A BIG HELP in thick cover, for it lets you see better than iron sights, so you can avoid limbs and brush between you and game.



7mm Magnum for an example, note that the bullet is 1¾″ high at 100 yards and still travels upward to 2″ high at 150 yards. Actually, in this case the bullet does not begin its downward flight until around 160 yards. I think the misconception comes from the much published term "mid-range" trajectory. This has led a lot of shooters to think the bullet starts to drop halfway to the target. The highest point of the arc, which occurs at about two-thirds of the sight-in distance, is technically known as the "maximum ordinate." In the case of my 7mm Magnum, it was sighted in for 240 yards, and two-thirds of that would be 160 yards. The 140-grain bullet is 1¾″ high at 100 yards and continues to rise for another 60 yards.

Although it's popular to zero in the open sighted rifle at 100 yards, the scoped outfit should be sighted in for longer ranges. If it does nothing else, it takes the guesswork out of the longer shots. On the 230-yard shot with the 7mm Magnum, the 140-grain bullet traveled in an arc only 2½″ high from the time it left the muzzle until it dropped the buck. This is a relatively low arc of flight, but the high velocity the slug was traveling (better than 3200 fps at the muzzle) cut down time spent in gravity.

There's no question the arc would have been much greater with a slower bullet traveling the same distance. With this particular load being zeroed in for close to 250 yards, the 140-grain bullet would have been just 3″ low at 300 yards and nearly 8″ low at 350. I think this shows rather vividly how fast a bullet arcs downward as its speed falls off. From 300 to 350 shows a drop of 5 inches. With a miscalculation of just a few yards on a long shot, a miss could result.

I like to be prepared for the unexpected, and that's why I sight my rifle in for the longest shot I expect to make. Also, I base my thinking on the fact no hunter knows for sure how far it is to his target. During my hunting career, I've miscalculated dozens of times and it showed up in my shooting. It's very easy to make a poor estimate across a valley or over a wide open strip of land. Distance is deceiving and there's no quick way to make a sure estimate in a matter of seconds. I've shot so much on the 100 yard range, I make a mental attempt to lay out the distance in 100-yard segments, but this is easier to say than do. My good friend Tom Leete can attest to how many times I've been wrong with my estimates on Potter County chuck hunts.

No Time to Spare

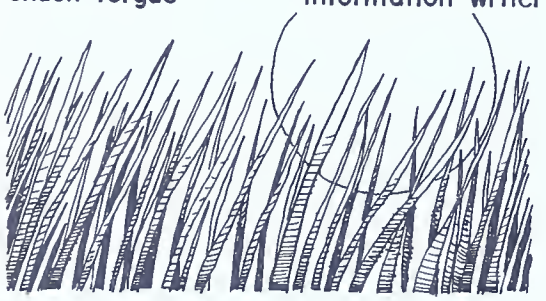
Most hunting situations do not give you time to figure distance closely. A bounding buck waits for no hunter; the shot must be taken during the few seconds the hunter sees his game. Then, there's the "indecision" type of shot at a standing buck where just the head, neck or back is visible. The hunter is indecisive and usually doesn't shoot. If the shot is taken, a miss normally is the result. A friend of mine watched a trophy-rack buck sneak out of a stand of pines some 225 yards away and stop. Knowing his rifle was on the target at 100 yards, it seemed reasonable the 200-grain slug would drop a few inches over the remaining distance. Two shots later the buck took off. Later he learned the range was 275 yards and his heavy slug was nearly a foot and a half low.

I won't go out on the limb and say ten thousand Pennsylvania big game hunters will come home empty-handed this fall because they didn't understand the flight of the bullet, but believe me, the number will be quite large. With today's open terrain hunting, trajectory is something every hunter should start to appreciate. The popularity of the rifle scope has put many hunters on watches that afford very long shots. It's almost useless to take one of these stands with a rifle that is sighted in for 100 yards. Knowing the path your bullet follows and zeroing in to take advantage of it brings success.

Good hunting!

In the wind

chuck fergus information writer



The Environmental Protection Agency has registered a new pesticide for mosquito control. The chemical, Altosid SR-10, is a growth regulator that prevents juvenile mosquitoes from maturing into adults. Juveniles are trapped by chemical action in their larval or pupal stages until they perish. The pesticide is specific to mosquitoes and poses little danger to wildlife, EPA says.

—Wildlife Management Institute

The American alligator, a rare creature throughout its range not long ago, is staging such a remarkable comeback in certain coastal areas of Louisiana that it poses a threat to public safety and creates problems for state wildlife officials. 'Gator populations in other parts of the South are also increasing.

—National Wildlife Federation

A 60-mile hiking and bicycling trail is planned for an abandoned railroad in western Pennsylvania and Maryland. The Western Maryland Railway will donate the right-of-way, which follows the scenic Youghiogheny and Casselman Rivers, to the Western Pennsylvania Conservancy.

—Western Pennsylvania Conservancy

United States energy use fell approximately 2.2 percent last year after rising steadily for more than two decades. This was the first decrease in energy consumption since 1952 and resulted from the Arab oil embargo, higher prices, economic slowdown, conservation efforts and a relatively mild winter.

—U.S. Department of the Interior

A proposed hydroelectric complex in Arizona's Sierra Estrella Mountains would reduce desert bighorn sheep habitat. Environmentalists say construction of the complex would drive out the sheep, which are extremely shy and retiring animals. Power from the complex would be used in Phoenix.

—Gun Week

Illegal poisoning and shooting continue to take a heavy toll of eagles in western states, even though killing one is a federal crime. Poisoned eagles may have fed on baits intended to kill coyotes. Fifty-one dead bald and golden eagles were reported to the U.S. Fish and Wildlife Service's Wildlife Research Center in Denver during the first half of the year. However, this number probably represents only a fraction of the total number of deaths. Ornithologists are concerned about bald and golden eagle populations in the lower 48 states.

—National Audubon Society

A Missouri Dept. of Conservation study of the lower Missouri River shows that channelization has greatly reduced fish and wildlife resources. To improve navigation, the river's flow is confined within a relatively narrow channel of rather uniform width, with a strong, swift current. Missouri River fishery has declined drastically, and much riverbank wildlife habitat has been lost.

—Wildlife Management Institute

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In order to supplement environmental education curricula, the Pennsylvania Game Commission has developed a 10-day teaching unit – Wildlife and the Environment. Its primary design is for the secondary school level, but it can be adapted for lower grades, Scout groups and other organizations interested in environmental education. This teaching guide is available free from the Pennsylvania Game Commission, Division of Information & Education, Box 1567, Harrisburg, Pennsylvania 17120.

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COVER PHOTO BY NICK SISLEY

Grouse and woodcock are different kinds of birds, with different flight characteristics, different habits. Yet they are often found in the same areas and are often hunted by the same kind of sportsmen—what an unimpressed acquaintance once called "dedicated masochists"! Be that as it may, there's no doubt that grouse and 'cock are truly great gamebirds, worthy of a man's lifelong efforts. To be in on a boy's first hunt for these, as Sisley tells about in his story beginning on page 7, is truly gratifying.

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It's New Year's Resolution Time

IT'S TIME TO MAKE SOME resolutions for the New Year. We're three months early, you say? Maybe so, according to the calendar, but to me there's something ridiculous about beginning a new year in the winter. Not even at the beginning of winter, which would make some sort of sense, or in the spring with the signs of new life all around, which would probably make the most sense, but in the middle, which makes no sense at all. Doubtless there's a reason for our traditional January 1 date, but at the moment it escapes me.

So, far as I'm concerned, the new year starts with the new hunting season, which means I'm even late with my own idea as that got underway on September 1. Actually, I thought of writing this piece a month ago, but compromised between the opening day for doves and that for the regular small game season. At any rate, it's time to get to the reason for the whole thing, the resolutions.

In one way, I hate to bring this up. It makes me sound like a preacher or somebody who thinks he has the right to tell others how to act, when all the time I know I'm just an average sort of guy who makes as many goofs as the next person. But some things bother me and one of these is littering. I know it's a stale subject. Many of us have been talking about it for years and doubtless will still be talking about it on the day we die. The reason is simple. It's still going on. Not as much as formerly, but too much. The worst part is that hunters are to blame for a significant percentage of it. We're the guys who constantly claim we care about the outdoors. We tell eaeh other—and anyone else who will listen—how much we contribute to improving our environment. We oppose all sorts of activities which degrade the outdoors and criticize anyone and everything that has a different viewpoint. And then we go out in the fields and forests ourselves and turn them into dumps.

What excuse is there for leaving empty cans, bottles, plastic sandwich bags, candy wrappers, lunch bags, empty cigarette packages, even cigarette butts, in a parking area or, even worse, around a deer stand? It's bad enough to leave such things, it's even worse when the following hunter gets impatient after awhile and breaks the monotony by checking his rifle's sights on a soft-drink bottle left by the previous guy. Then we have numerous pieces of sharp glass to contend with. And hunters are to blame for this. Nobody else. Nobody else gets back into the remote areas where these things are often found.

There are countless things hunters can take pride in, but this dumping habit is just something to be ashamed of. We have to form the habit of carrying out every manmade item we carry into the woods. Anyone who can carry a 12-oz. can of Coke into the brush can certainly carry the 1-oz. empty can out. And candy or sandwich wrappers weigh almost nothing. So let's make a resolution. You bring yours back with you and I'll bring mine back with me, okay? And between us maybe we can even bring back some of the stuff left by the slobs who aren't only thoughtless but simply don't give a damn. We'll always have a certain percentage of those with us so we might as well start picking up after them. It's a thankless job but what's the difference—most jobs are but they still have to be done.—*Bob Bell*

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Once in Awhile the Red Gods Smile Quickly, but Usually Their Beneficence is Earned . . .

Through Long Lonely Hours

By Will Johns

LIKE A COMBAT soldier, you probably remember the good days . . . the days when the Red Gods smiled. You remember the days when you were warm, dry, well-fed, and elated with the sense of victory. But you forget those other days, which were *most* of the days, when you were dog-tired, wet, cold, hungry and thirsty . . . the days when, despite your best efforts, you met defeat.

Hunting, in my experience at least, is like that. In ways that the non-hunter can never understand, the "red-letter" days in hunting, as in war, are but brief intervals of time when measured against the total hours devoted to such efforts. There are long, long hours of physical hardship and fruitless effort between shots . . . countless days afield which, if measured only by game in the bag, could be considered wasted. We usually don't brag about those days, nor do they form the basis for the tales of the hunt we spin around the campfire or in the club room. We mostly remember and tell about the hunts which ended in victory.

I remember a day, for example, when a flock of black ducks came down the creek as the morning mists were rising. They swung in over the decoys but kept on heading south. Then, as if by magic, they turned to my call. As they swung back in a perfect "V" formation, set their wings and started to glide toward the upstream decoy, I crouched low in the blind and felt that age-old thrill of success. Had, after all, my decoys deceived these wary migrants with eyesight far better than mine? Had my feeding "chuckle," blown gently through the old cedar call, really sounded like the natural thing to these magnificent birds? Whatever the reason, or perhaps only by dumb luck, I had a brace of northern blacks to take home that day, and to relish at the dinner table soon afterward.

But I cannot remember, nor do I talk or write about, the lonely, uncounted hours along that creek or in other wetlands when no birds were flying. Or even those days when I saw ducks but they simply passed far overhead, totally ignoring my decoys, calls, and everything else except their age-old instinct to keep moving south toward their wintering grounds.

Memory of Many Dawns

I can remember, but find nothing newsworthy in writing about, the penetrating cold of many dawns in my duckblinds . . . the aches and pains that crept into the muscles of my arms and legs from being cramped hour after hour in the small confines of the blind. Likewise, what is there to say about the days when the rain, sleet and snow gradually soaked through every layer of wool and down until I sat shivering and miserable, wondering why I was there. Yet I always stayed . . . just one more hour after one more hour . . . in the hope, usually futile, that the birds would fly.

Nor do we often try to describe for our families and non-hunting friends (because they couldn't possibly comprehend) the hours and days spent climbing the steep slopes of the Alleghenies and all the other mountains, ridges and hills across Pennsylvania. How can you truly create written or spoken images of what it really is like to strain every muscle, joint and bone in your body, climbing some steep and rocky mountainside, just to reach another bench in hopes you will find that whitetail buck, a



SUDDENLY, without any sound, the deer appeared beneath the apple tree some 30 yards away. She simply materialized out of the early morning mists.

flock of wild turkeys, or the object of your chase. Who, except another hunter, would believe that any man in his right mind would torture himself and even risk his life and limb in pursuit of quarry that easily can outrun or outfly him, usually sees him and flees long before he sees it, and always has the advantage of traveling in territory known from birth, while the hunter is but a visitor in a strange place.

Yes, we hunters boast of our victories—the days when we returned from the hunt with wild meat for the frying pan or freezer. But every one of us would have to admit that most of our days afield are little more than hikes in the great outdoors and excuses to get away from our daily toils and tribulations. In many ways, hunting and hunters can be likened to the title of a wonderful little book I discovered years ago—a book written to recall the boyhood I knew in the 1920s and '30s. It was called *Where Did You Go? Out! What Did You Do? Nothing!*

But for every true hunter and sportsman, as this series of articles has so beautifully described them, there are those few moments of victory, those few days of success, those rare occasions when the Red Gods have favored us with a real trophy of the hunt.

The one I remember most vividly was a bow hunt for deer on an October day of almost two decades ago. Five of us were in camp. We all had years of gun hunting experience, but not much with the bow and arrow. After all, how many Pennsylvanians twenty years ago had much bowhunting experience? But we had hunted together with rifle and shotgun for several years and thus had developed that sense of camaraderie best known to outdoorsmen. And we had practiced faithfully with the bow on targets and field courses simulating the real thing.

Now, as we left our Lycoming County cabin early on that October morning, our hopes were high. We were headed for an old, abandoned apple orchard where we knew the deer would be feeding. With plenty of hunting heads sharpened to a razor edge, our strategy for the hunt was simple—to take stands, sit quietly, and wait for deer to move within range.

October in Pennsylvania's highlands is a most glorious time to be outdoors. Indeed, it is the time of year when Mother Nature makes an extra effort, like the beauty queen before the pageant, to put on her best makeup. I will never forget sitting there next

When The Red Gods Smiled

to the old stone foundation of a farmhouse or outbuilding (I'm not sure which) that had housed a pioneer family many long years before. I will always treasure the sight, then as now, of the sun rising slowly over the mountain ridge to the east. With each passing second, the deepening rays changed both the color and pattern of the panorama before me. Bowhunters know the sight of Pennsylvania's flaming foliage is unsurpassed anywhere in the world, and even without a deer entering the picture, this fall spectacle is worth far more than money can buy. Not enough people get to enjoy the true beauty of Penn's Woods during October, certainly not the city dwellers whose vistas are made up of concrete, glass and steel.

I Remember . . .

And so I remember sitting there as dawn slowly arrived. I also remember shivering a lot, for it was frosty on that early October morn. I remember how the flaming foliage was accented against the blue-green patches of hemlocks and pines. And I remember the birdsongs as phototropism triggered age-old instincts to sing, and I was constantly distracted from my purpose by the chickadees, sparrows and migrating warblers that flew in front of me.

Then suddenly and without any sound, a deer appeared beneath the apple tree some thirty yards away. I did not see her approach. She simply materialized out of the early morning mists. It was a big doe, and, although I would have preferred a buck with a good rack of antlers, this was the moment I had waited for. This was the final test of all my long hours of practice. This was the ultimate challenge to my skill, marksmanship and physical condition.

With a heart beating like a drum in my ears and a trickle or so of nervous sweat rolling down my face, I slowly nocked the arrow, eased up the bow, drew steadily but silently on the string, and took careful aim. As I released the arrow, the deer raised her head, twisting her neck



THE BIG DOE jumped a foot or so straight up, then landed for a split second before taking off in huge, bounding leaps. I carefully watched her direction.

in my direction, ears straight up and nose twitching as she, for the first time, sensed my presence. But it was too late and I saw the arrow hit broadside. The big doe jumped a foot or so straight up, seemed to hump her back, then landed for a split second before taking off in huge, bounding leaps. I carefully watched her line of flight as I realized for the first time that my shot was imperfect. I knew, and instantly regretted, that the arrow had hit too low and a little too far back of the front legs.

After waiting the appropriate period of time recommended by all the experts (I probably withstood the suspense for at least 20 minutes although it seemed like eternity), I moved to the spot under the apple tree where she had been standing. Sure enough, within a few steps I found a few drops of blood and several white hairs. Five or ten paces further on, more of the same. There was a trail to follow—not much to

be sure—but enough to go on. My hopes of finding the deer were high, as were those of my hunting companions who had joined in the search by this time. But within a hundred yards the spoor gradually diminished and then completely vanished. Even on hands and knees, we could find no more sign of that wounded deer.

But I had fixed in my mind the general line of flight. By now it was mid-morning and there was little chance that any other deer were on the move. Thus, all of my companions volunteered, as true sportsmen always do, to abandon their hunting and join me in a search, as futile as all of us secretly felt it would be, for that wounded deer. By noon, we had combed the woods for hundreds of yards without success. Hot, tired and disgusted, we assembled for a lunch of sandwiches and hot tea boiled over a small stove. There was little to be said other than the usual banter shared by all hunters as they retell the stories of other days, other hunts. Finally, someone pronounced the "benediction" of, "Let's give it one more try."

Hopes Almost Gone

Although hopes of finding the deer were almost gone, we started off again through the woods in the general direction I had last seen the doe moving. By then, the bright sun in a cloudless sky had warmed the air to the point where trickles of sweat poured down my face and neck as I silently moved across the carpet of scarlet and bronze leaves.

Suddenly, and much to my surprise, a deer lurched to its feet out of a patch of laurel some twenty yards in front and slightly to the right of me. I saw it was the one I had hit earlier, and I vaguely recall hearing one of my companions cry, "There she goes!" In the same instant, I pulled another arrow from the quiver, nocked it, took quick aim as I stretched the bow to full draw, and released. It was a snap shot, fired more in desperation than in hope. But that feathered shaft flew straight at the moving target, hitting the deer high in the back and just behind the shoulder blades. It severed her backbone and she dropped like a stone. It was an instant kill, the aim of all true hunters. I had succeeded, with help from my hunting companions, in achieving something that has called men from earliest times into the flaming foliage of the Pennsylvania highlands each fall. I had accomplished my goal; the rest is but memory.

The date was October 9, 1957, and the time was 2:30 p.m. Later that afternoon, one of my friends in the hunting party found a huge shelf fungus on which he inscribed with a pointed stick that date, time and place, along with the names of the men involved in the hunt. Each time I look at this unique souvenir of our hunt, I am reminded of a special day when the Red Gods smiled. But more than that, I am reminded that in hunting, as in life, persistence and dedication, coupled with unselfish companionship, are the basic requirements for success. And perhaps that is what sportsmanship is all about . . . and what causes the Red Gods to smile occasionally upon us all.

Hunters' Help Needed

Hunters are asked to be on the lookout for banded doves and waterfowl. Bands should be returned to the Division of Game Management, Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120. Please include the date and specific location of each band taken. This information is a great help in the continuing studies of migration, movements, reproductive success and survival percentages of these birds.

Also be on the lookout for color-marked shorebirds. Colors consist of attached material or dyed feathers. Report color sequences of bands and tell which leg(s) or what part of plumage is dyed.



SISLEY, JOHN KRIZ and friend Star display results of hunt.

Even for the old pros it was a great day in Erie County, but for young Andy Martin, on his first hunt, it was . . .

W—(for Woodcock!)—Day

By Nick Sisley

IT WAS ONE of those sparkling clear October mornings. The rising sun had just finished burning away the last bit of foggy haze as we prepared to start our hunt. Fifty yards from where we parked, Star, my little pointer gyp, stacked up in a young stand of aspen. As we walked in for the flush, I couldn't help thinking how much the setting looked like a picture postcard—the light-colored aspen bark, the dog in striking white, the twisting gold aspen leaves, the fiery red maples farther down through the cover. October was at her peak, and from the ease with which my dog discovered the first bird, it looked like the woodcock flights might be at their peak, too.

Ruffed grouse populations seem to fluctuate every year in any particular locale. And although this most challenging of upland game birds did not fare well in the Erie area during the '60s, there seems to be a definite upward trend in grouse populations today. The moist ground and abundance of recently-timbered-off areas create ideal habitat conditions for woodcock, too. Erie County has its own native supply and supports countless migrating birds as they filter in from further north on their way to warmer climes.

All of which meant little to my pointer and the bird she was locked on. We moved in. At its flush, the bird towered through the aspens. I shot too quickly with my light, open-bored double on the first shot, but toppled the bird with my second charge.

"Knocking down a bird is not only a great way to start a woodcock hunt," I commented, "but finding one so quickly is pretty rare."

"I haven't been in this cover yet this year," John Kriz, one of my partners, responded. "Every time I've visited it in the last few years, though, it's been loaded. I think most are natives, rather than migratory birds."

I was out with Kriz, a Game Com-



GUN READY, John Kriz moves through one of the aspen-studded covers of Erie County's fine grouse and woodcock country.

mission wildlife biologist from Fairview, a hamlet just west of Erie, Andrew Martin, a district game protector in Erie County, and his son Andy. The boy had just turned 12 and this was his first hunt. I felt lucky to be out with this group and was especially grateful for the chance to share in young Andy's first try for game.

I was carrying my favorite woodcock gun, a light, fast-swinging 20-gauge custom made by Mario Beschi in Italy. Its 24-inch barrels are bored cylinder and improved cylinder—just the ticket for short-range, unpredictable targets. Kriz was toting his longtime favorite, a Model 12 Winchester 20-gauge with 26-inch improved cylinder barrel, while young Andy had a little Mossberg 410 bolt action. His father was not carrying a gun on this hunt, preferring to stay close to his boy and help him with advice or suggestions if any seemed appropriate.

The next point was in front of the youngster. All three of us grownups were anxious for him to get a shot and take his first bird. We urged him to walk in on this point alone.

The dog was along the edge of the cover. Plenty of bare earth showed, but it would be a tricky shot for the youngster through the aspen and briars. The timberdoodle got up, stayed low, swinging left. Andy was hesitant—after all, this was the very first woodcock he had seen pointed and flushed. He didn't more than start his little 410 toward his shoulder before the tough target flitted out of sight. His father told him he'd have to get into action a little quicker if he expected to score on woodcock.

Star's Bell Stops

Kriz was working the left side, and I was in the middle. Minutes later we heard Star's bell stop ahead of him. It was an extra thick spot, and as we both headed in the direction of the dog we heard a ruffed grouse thunder out. The bell clanged once, evidently as Star lifted her head to watch the bird fly off.

"I didn't get a glimpse, John. I like to follow them up, but I have no idea where that one went," I said.

"I think it headed that way," John pointed. "We'll be over there in half an hour or so. Maybe we'll jump it then."

Andy and I worked right into the thick corner before swinging left, changing our direction by 90 degrees. Right at the edge the little gyp slammed into a classic woodcock point. Her chest and head were low to the ground, her back legs straight up, tail 12 o'clock high. Everything indicated that the bird was only scant inches in front of her quivering nose.

"Come on, Andy," I said. "Let's see if you can't get on this bird. Remember, swing, track 'em, and dump 'em."

We both walked in, Andy on the left, me on the right. I figured we had this bird dead to rights. But the bird twittered out from under the dog's nose, around the aspens, twisted back

over some willows and gave neither Andy nor me a clear shot. In fact, it went just in the opposite direction we figured it would.

While Andy and I had walked in to flush that bird, John had been waiting for us to retrace our steps toward him and form the hunting line again. Just as we got back he took one step and a tight-sitting woodcock helicoptered up right in front of him. It had been sitting there all that time. When it towered at the top of the aspens, he clipped it cleanly.

"Good shot, John. You slapped the trigger at exactly the right time," I said.

"Yeah, for a change. Sometimes I'm a little too quick on woodcock—I'm pumping an empty out just at the time I should be shooting," he responded.

"Hear that, Andy?" his dad asked. "Many times you have to shoot as fast as you possibly can on woodcock—and grouse, too. But there are other times when it's better to hold off a few fractions of a second, until the bird is in a more vulnerable position. It takes experience to realize when to do what. Mark all that down in your mental notebook."

Big Swing

We made a big swing, this time going back along the east side of the cover. On the way a grouse, probably the one the dog had pointed previously, thundered out a little wild in front of Andy as he worked the edge on my right. He marveled at the roar of wings and the speed with which this bird can vacate the cover. When we were almost back to the car, John instructed us to make another right turn. We crossed a small abandoned field and entered a second likely looking woodcock patch.

"This is a pretty big cover, Nick. We can spend the rest of the morning in here. I've got one or two additional places in mind for after lunch," John said.

"Sure looks good here, John." Then I turned to Andy. "This is typical woodcock habitat," I told him. Try



to get the idea in your mind now of what a woodcock patch looks like. In future years, each time you see a cover you'll be able to guess whether or not it will hold birds."

To the front, between John and me, the bell stopped tinkling again. John and I moved up, anticipating another flush. It was an older stand of aspens, and as we were walking in I thought to myself that this could be a relatively easy shot. The bird flushed a little prematurely; John didn't have a shot, and I didn't either until the bird was some distance out. The little 20 side-by-side barked and the timberdoodle plummeted straight down. There was no wing action, indicating he was dead in mid-air.

I failed to mark the spot perfectly. We walked up and scoured the area for long minutes, unable to find the bird. Even when we called the dog in, she found no scent. She was anxious to find another woodcock and wouldn't stay in close and help us with the search.

John had the good sense to hang his orange cap on an aspen where I had originally indicated the bird should be. All four of us continued the search.

"I'm sure he never moved once he hit the ground," I said. "I wonder if he somehow hit and tumbled under the leaves."

Then young Andy found a few drops of blood. "He's got to be right around here," John commented. "A



WITH STAR locked up on point, young Andy Martin moves in to flush woodcock, hoping for his first kill on these difficult targets.

woodcock hit like that can't go far."

But the search continued for more long minutes until we found the bird approximately one foot from where Andy had spotted the blood splotches, and *exactly under* the tree where John Kriz had hung his cap! It just goes to show how well these birds are camouflaged on the fall forest floor.

The sun was up higher now, the temperature warming, and as our hunting quartet chugged up one of Erie County's minor grades I was glad that I had left my hunting coat in the car and donned only a vest. When we reached a small knoll covered with young aspens and other intermixed early second growth, the action got into high gear. Perhaps it was a concentration of native birds, or maybe a flight had picked this part of the cover for a one- or two-day stay. At any rate, the more John, Andy's father and I tried to get the youngster into the right place, the more frustrated we became. Birds were always going out in an unusual manner, offering us the shots. When we had young Andy in the middle as the primary gunner and walked in on a point, he was always out of position at the flush.

John and I bagged a bird or so at this spot, but passed up many shots hoping Andy would be able to get his little smoothbore into action. It just wasn't meant to happen on that little knoll. Right in the midst of it all, a ruffed grouse couldn't stand it any longer and thundered out on John's right, angling behind us. John swung and slapped the trigger just as he passed behind the leaves and went out of sight. I saw the bird tumble in a puff of feathers, but John didn't.

"Don't know whether I got him or not. He was out of sight by the time I shot," John said.

"No sweat, John, I saw that one go down. You nailed him good. He'll be right back here." I hurried over and picked up the bird.

"That was a doggone good snap shot, John," I said. Then I turned my attention back to Andy. "That's one of those times when you have to shoot quickly, Andy. There's no time to think about it, there is not even time to hold up just as the bird passes out of sight. You've got to slap the trigger just as soon as you get your shotgun to your shoulder."

"I get it, Nick. Before this day is over, I'm going to score on a bird. Just watch and see," Andy said with enthusiasm.

Long Shot

A wild, wary grouse jumped from the cover in front of me. It was a long shot for the open-bored woodcock gun, but one of the little No. 8s clipped a wing and the bird came spinning down. I raced forward and had to catch this one on the ground. It was a nice male grouse, and we all took time to admire his regal beauty.

We started hunting again, but all realized at once that the dog's bell was silent.

"Last time I heard the bell, it was over behind you," I told John. He found the dog pointing right on the edge of the cover. When the woodcock erupted it headed for a little opening, and John dropped it.

A short time later, as we were angling back toward the car, a bird jumped in front of me and I bagged it. Our total now was four woodcock and one grouse for me, three woodcock and a grouse for John. Poor Andy, the guy we all wanted to see score, hadn't dented a primer yet.

We reached an open area with an evergreen to the left and some young aspens to the right. The spot was shady and free of grass, a perfect feeding location for a timberdoodle. The pointer skidded to a stop a few feet away, indicating a bird had indeed chosen to probe for worms there.

"Andy, I can feel it in my bones. This is the spot. Move on in," I said.

Andy looked like he was walking on eggs as he slowly crept forward, gun at port arms, finger on the safety as he edged in closer. When he was just behind the dog a woodcock took flight.

There was no hesitation this time—only the mounting of the shotgun, smooth and sure. The little 410 cracked, and the first upland bird Andy had ever shot at was his.

"I got it! I got it!" he shouted. Before running to retrieve his prize, he praised the pointer which had helped him achieve his first bird, patting her and saying, "Good girl, good girl."

Then he ran forward and picked up his bird. I snapped his picture as he stood up and turned to face his dad proudly. We took time for a few handshakes and back pats. For all of us it would be a long-remembered occasion.

Left Holding Camera

I wanted a photo of one of my partners walking in on a point. Consequently, I handed my smoothbore to Andy's father, and as we hunted the only thing I carried was my camera. We hadn't gone a hundred yards when not one but three grouse thundered out, one at a time, from the tangle of a blown-down tree. Young Andy wasn't able to glimpse them until they were far in the distance. Out of the corner of my eye, I saw Kriz starting his smoothbore into action on all three birds, each time darting the barrel either right or left, looking for an open shot. He never got one. Guess who had three perfectly open grouse shots in approximately four seconds—me, the fella with the camera!

Each bird flew off to our right. Rather than follow them immediately, John suggested we continue working the edge and south side of the woodcock cover. We could work the north side coming back and hopefully reflush the grouse then. It was a good idea, because 50 yards farther on Star went on point and John collected his fourth timberdoodle.

John was the guy to be in the right place at the right time as we swung back, hoping to put out those grouse. Actually, young Andy flushed the bird for us. It thundered out, coming back overhead, and John had the only shot. The bird had just disappeared behind the leaves when he slapped the trigger. The secret on such occasions is to remain silent and listen for the bird hitting the ground. I did so and,

ANDY MARTIN with his first gamebird, a woodcock he dropped cleanly with one shot from his 410 Mossberg bolt action shotgun. A great moment!



sure enough, heard the grouse hit.

I hurried over and found the bird. It hadn't even fluttered. It was stone dead.

"I'd bet that's one of the three that flushed over this way," John said.

"No doubt," I said.

"Remember that, Andy. When you're hunting grouse, either follow up your flushes or eventually return to the area that you figure birds have flushed to. It really pays."

We moved on and 75 yards farther there was a small opening in the cover. "Andy, here is another thing to remember. Woodcock, or any other upland bird for that matter, don't usually land in the really thick cover. Instead, they look for a small opening just like this. When you've seen the general direction that a bird takes, get ready when you enter a little opening. That bird is probably somewhere around here."

Andy walked forward, and when he had almost decided that there was no bird there, a woodcock flushed out. His 410 came up in a blur of motion, and when the stock hit his cheek he slapped his trigger and the second woodcock of the day—rather his life—was in the bag.

"John, I think we better call it a day," I said. "This little pointer has had it, we've got plenty of birds, and Andy's had a great first hunt."

We turned for the car. The sun, starting to lower in the mid-afternoon sky, lit the aspen leaves that that fluttered faintly on the trees. It had been a good day, one that John and I and Andy Martin, game protector, and Andy Martin, young hunter, would remember for a long time.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Birds of the State College Region, by Merrill Wood, State College Bird Club, 626 W. Nittany Ave., State College, Pa. 16801, 38 pp., $1.25. This small paperback lists the average dates of arrival and departure of all bird species found in the central part of the state, tells whether the species winter here and has notes on where to find them.

The Experts' Book of Upland Bird & Waterfowl Hunting, ed. by David E. Petzal, Simon and Schuster, 630 5th Ave., Rockefeller Center, NYC 10020, 315 pp., $9.95. A dozen of America's top outdoor writers give their views on hunting pheasants, quail, woodcock, grouse, doves, turkeys, ducks and geese, plus good information on guns and dogs.

Hunting the American Wild Turkey, by Dave Harbour, Stackpole Books, Cameron & Kelker Streets, Harrisburg, Pa. 17105, 256 pp., $8.95. The author, a contributing editor of "Sports Afield," has been hunting this great game bird for over 30 years—by calling, stalking, canoeing, in spring and fall, with gun and bow, from Pennsylvania to Florida to the plateaus of the Western states—and this book sums up his experience and knowledge.

Eastern Trips & Trails, by Bill Thomas, Stackpole Books, 253 pp., paperbound, $4.95. Tells where to hike, camp and drive in 60 areas of 16 states, from Maine to Florida. Usable information; many maps.

Shooter's Bible, Stoeger Publishing Co., 55 Ruta Court, South Hackensack, N.J. 07606, 575 pp., $7.95. Besides the usual excellent catalog material, this 67th edition includes feature articles by a dozen top gunwriters, including GAME NEWS columnist Don Lewis.

Deer Hunting Across North America, ed. by Nick Sisley, Freshet Press, Rockville Centre, N.Y. 11571, 281 pp., $12.95. This fully illustrated volume covers all types of deer hunting, from the whitetails of New England, Pennsylvania, Michigan and the South, through mule deer of the Rocky Mountain states, the little Coues of the Southwest, and the Columbia blacktail. Eighteen writers, including Pennsylvanians Roger Latham, Don Lewis, Dave Drakula and Bob Bell, have contributed chapters, and the editor too is a Keystone Stater. There's no doubt that deer are the most popular big game animals in North America, and this book is loaded with down-to-earth suggestions on how to hunt them successfully.

But What Are We Going to Tell Our Children?

By Nancy Williams Anderson

THE THOUGHT hit me suddenly one day. My husband was preparing to take one of our most prized possessions to our son's kindergarten class. Dick is a district game protector in Northampton County and he was scheduled to present a program on woodland animals to the class at Whitfield School. Not necessarily a difficult assignment, but one that can be challenging.

Having been a teacher myself, I know the educational value of visual aids, of seeing and touching the real thing. So, I didn't mind. I had taken it to class myself, dozens of times, and allowed children to "pet it" and rub the fur. I, too, had watched youngsters' eyes light up on seeing an animal so large, to be so close and able to touch and feel. "Look at his claws! Are they real? Man, look at those big teeth!"

My bear rug was going to school again.

Of course, Dick would try to cover the various aspects of game management and conservation, but these can be difficult to convey to a child who is only five or six years of age. Difficult but not impossible. Changing terminology and keeping explanations simple usually suffice. Children at this age are not as hard to reach as some adults. Dick would "show and tell" the children about the familiar animals of Pennsylvania and would undoubtedly spend much time answering the usual questions:

"What do they eat?"

"Where do they live?"

"Where do they go in the winter?"

But someone in the class was apt to ask, "How did the bear get dead?" Or perhaps one of our son's friends would turn to him and put him on the spot with, "Why did your mommy shoot that pretty bear?"

What are we going to tell our children? How do you convince a youngster that under certain conditions animals may be killed; that this is not morally or ecologically wrong and even *must* be done for the good of wildlife? Today a child may have to defend the actions of his hunting parents to his peers, when as recently as 10 years ago he would have been the envy of his neighborhood.

How Things Were in '64

I thought back to how things were in the fall of 1964, when the beautiful female bear ambled out of a bog in Pike County and came toward me. I decided to tell my children of the day's events.

I was single then, loved hunting and fishing, and was overjoyed when a friend called on a Friday evening and wanted to know if I would be interested in joining her and her husband on a bear hunting trip the next day. Sounded great! We had all hunted together before and I knew we would have a lot of laughs and good companionship even though we probably wouldn't see any bear. As with most sportsmen, for us the success and memory of a hunt is not measured by the amount of game we bring home, but by our genuine love of the outdoors, respect for wildlife and the challenge of meeting it on its own terms, on its home field, not ours. Luck had its part to play, also.



NANCY ANDERSON knows that her Pike County bear trophy was not Gentle Ben or some roly-poly playmate, but rather a legitimate game animal taken in legal season and by sporting methods.

Our hunting party, consisting of my friend Betsy Honey, her husband Dwayne, father-in-law Ray, and my brother Guy, left for the beautiful unspoiled part of the Poconos by Jeep the next morning around 5:30. In those days you could not hunt before 7 o'clock and thanks to new Rt. 80, part of which was opened, we could make good time to Marshall's Creek, get on the old highway and still be in the Flat Ridge area in plenty of time to walk to our stands by opening hour.

It was bitterly cold and the leaves and twigs snapped crisply underfoot as we made our way along a State Game Lands trail. The big swamp lay to our right and we simply planned to spread out along the edge, about 200 yards apart. Numerous other hunters were in the area, judging by the two dozen or so vehicles that also chanced broken springs on the old logging road branching off of Flat Ridge.

The early morning was quiet, too quiet, and too cold to just wait on stand. Around 9:30 I made my way back to the Jeep for some warmth and good hot tea. I was still only warm on the inside when I heard the familiar "barking" and shouting of someone starting a drive. No time to be sitting inside. I headed back to my stand. Strange how anticipation and excitement can warm the blood!

Above the Bog

I reached the small boulder that had served as my post earlier. I was on a slight hill, perhaps 50 yards above the edge of the bog. Visibility to the swamp was clear; beyond that I couldn't have seen a bull elephant doing a fox trot! I was relying on sound. I was no bear expert, but I felt if a bear were chased out during this drive, it would be coming out on a dead run, making all kinds of noise and I'd hear it. Wrong!

I was concentrating on a grassy area between a blown-down tree and the swamp itself, when a flash of black suddenly caught my eye and disappeared. My eyes watered. I blinked. Was I seeing things? There wasn't a sound down there. My heart pounded. There it was again. More black, moving, coming my way! I rested my elbow on the boulder and slowly eased off the safety. I couldn't believe my eyes. The bear cautiously moved out of its hiding place. It was constantly raising its nose, sniffing the air. Something to her left displeased her. She moved out and to her right, walking slowly, directly toward the wind-fallen tree. I aimed for the shoulder but must have pulled to the left for my 180-grain British 303 slug centered her neck. The bear went down and never quivered.

She was a magnificent female, her pelt thick and shiny, in prime condition. On closer look, I noticed something strange. Her feet and paws were dry and dusty. She hadn't come through the swamp at all. My guess was she was lying just inside the swamp edge all morning, only a short distance below me.

I had no pangs of conscience as I examined my prize, nor do I now.

She was not Gentle Ben. She was not a roly poly plaything such as you see depicted in movies of late. Nor was she a magical bear that arrived just in time to save my life from a falling tree. She was a real bear. One of 75 taken that year in Pike County. She undoubtedly had produced cubs, and those cubs have since produced cubs, and I have no doubt that many of her offspring still roam the Porter's Lake area.

I am one woman who has all the respect in the world for animals and their struggle for survival. I can marvel at their cunning, their natural protection of their young, their sometimes comical actions, or their ferocity and their beauty. But I am a realist. I know that the conservation agencies know best when it comes to wildlife management. They know what they are doing. They do not deal with emotion; they deal with facts. I will tell my children this.

Sorry - and Glad!

We all love to look back in time and ponder the good old days. We're sorry that some things had to change —and glad that others did! Histories are written in decades, we speak of our own lives in terms of decades. We look around in disbelief at how things have changed in just 10 short years. We laugh at the changes in styles. How silly we must have looked wearing *that* 10 years ago! Even automobiles that are 10 years old look ancient when compared with the models of today.

We sportsmen, too, can look at how "different things were back then." Sure, areas that were always good for a rabbit or two are getting fewer. In their places are houses, malls, shopping centers, gas stations. In other places four-lane highways cut through swamps that once were wet, once provided food and held game. But, thanks to our own kind, the hunter in future decades will still have places to take his youngsters on their first hunting trip.

HUNTERS Stay Out Of Unharvested Fields!

I will also tell my children of that faction of today's society which is trying desperately to make the hunter and sportsman look his worst—the so-called "friends of animals" who are critical of the very people who are supporting *true* conservation programs and financially supporting research, the very people who help propose resolutions and legislation on protection, land purchases and habitat improvement. That faction is trying desperately to paint a picture of sportsmen as unintelligent, immoral, psychotic thrill-seekers; they say we need our guns as a symbol of our manhood. I resent that! So do more than one million licensed female hunters in the U.S. today.

Tell your children that we have a precious right to own firearms and an equally precious right to hunt in Pennsylvania, one of the greatest hunting states in our country. *Tell them.* They may not understand everything you say but keep working at it. When your child is old enough to hunt, he'll see why you hold that right so dear. I'm going to tell mine. I'm not going to let my children be anything but proud that the hand that rocked the cradle also squeezed the trigger!

The School Science Curriculum and the Sportsman

By Hank Rosen



MOST YOUNGSTERS have a natural interest in the world around them. Encouraging this curiosity is important, and a good teacher makes every effort to do this.

SEVERAL YEARS ago I had occasion to use in several publications the titles "Where Do We Go From Here?" and "We Must Take Another Step Forward." During the intervening years, there have been tremendous changes in the attitude of the American public—sometimes very involved, usually most passive—concerning the future of the nation's resources.

In my last article, the general theme of involvement of the school library was the central issue. In this article, effort will be made to bring to the sportsman means by which he can, through direct involvement and indirect participation, get input into the science offerings of his hometown schools.

Many sportsmen in the Commonwealth belong to one or more organizations—organizations which have as their basic purpose involvement with and proper utilization of the outdoors. In order for the sportsman to get into the school framework, the organizations represented by thousands of participants must have people who can act as coordinators and contact individuals in the science areas of the school.

We frequently believe science studies are limited to the Commonwealth's secondary programs; in reality, science teachings begin with the first entry into school. Many kinds of situations have involved loaning or making outright gifts to science teachers and/or their classes. One incident which comes to mind is making available to a biology class fertile eggs and their brooding facilities. This enabled the class to become personally involved in more than a textbook aspect with the hatching and early growth of pheasants and quail. Such an activity has direct benefit to the school and ultimate benefit to the organization which provides these materials, insofar as 1) they are providing a community service and 2) the ultimate release of the mature birds to the public becomes further proper utilization in a sporting manner.

Actively Engaged

Here are some other ideas of a similar vein. Students can be actively engaged in raising fish bait (minnows) as well as game fish. Or a lower-level science class might breed and grow worms for fishermen, specifically, the large night crawlers or night walkers which are so eagerly sought and so relatively rare in some places.

Another kind of activity which has been used successfully is the making available to school classes small plots of land which can be used as forestry

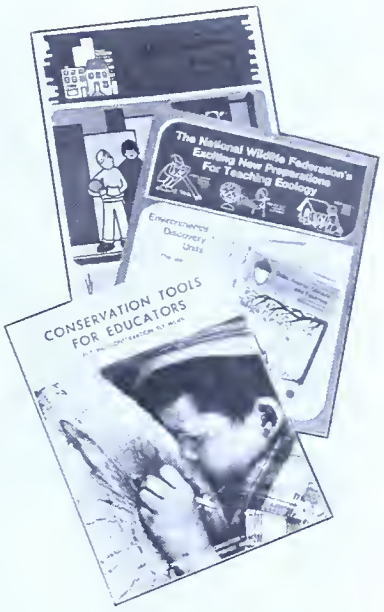
seedling nurseries or wildlife management areas. This helps the students to realize the tremendous amount of time and effort necessary for the creation of forests. It also gives them an opportunity to see under controlled situations how different environmental factors affect the growth and interrelationship of living things.

Many years ago I witnessed in another state an event which has stayed with me ever since. It was the involvement by the science departments of three high schools in providing an evening-long symposium and career conference for young people who might be interested in the outdoors. In other communities, I have known of civic organizations which underwrote such programs. These programs should be naturals for the many sportsmen's organizations throughout Pennsylvania. An evening affair shared between high schools of several communities, wherein young people who are interested in biology, wildlife, and other natural resources would have the opportunity to talk to college counselors, conservation officers, and state department officials concerning training and employment in these fields, would be highly worthwhile.

Work on Gypsy Moths

Several years ago, Dr. Francis Trembley, a professor at Lehigh University, did a tremendous amount of work on the gypsy moth. This is a perfect example of an opportunity for young people working through organized sportsmen's clubs, to make assessments and census insect pests and to become involved in such control work as the organization may be in a position to underwrite. In this case of the gypsy moth, the work involved the placement of baited traps which resulted in considerable curtailment of the insect.

Some organizations have found it beneficial to be on the mailing list of the U.S. Government Printing Office and thereupon make available to science teachers and their classes the inexpensive booklets and materials



BOOKS, booklets, magazines, training aids, pamphlets —all are important in the teaching process.





TESTS WHICH STUDENTS CAN perform in the field give some idea of water quality, help them realize the problems of pollution.

which are put out by various government agencies. In many cases, these are easy reading and eagerly accepted by the teachers. Current materials include "A Teacher's Guide (K-6) on the Natural Resources and Career Awareness." Although published by the Federal Government, this 100-plus-page booklet has what might be called a direct involvement of Pennsylvania people. It was assembled under the direction of Dr. McClay of The Pennsylvania State University and Mrs. Eleanor Bennett of the Pennsylvania Department of Education, who served as a member of the Project Advisory Committee. Other sources of publications are the Department of the Interior and the Department of Agriculture. Teachers frequently are operating within such tight schedules that when they get any help from an outside source, they are most appreciative.

Several communities have advisory committees, and there is no better way for the outdoor enthusiast to serve his community than to become a part of a school advisory committee, if such exists within the framework of the school district.

Huge tracts of land owned or leased by various sportsmen's groups dot our rural areas throughout the state. For the most part, these tracts are lightly used except in hunting season. This means the land is lying in its natural state, not being utilized for any purpose most of the year. It certainly could serve a useful purpose. If there is an area of land adjacent to your community which might be employed by science teachers for either field trips or projects, this land could serve both an educational and a greater utility purpose were it to be the focal point of certain projects.

The public school library, which is usually overtaxed effort-wise, is underfunded and highly used. With that point in mind, Commonwealth sportsmen should consider providing members of school staffs with outdoor-oriented books. The Golden Books and The Field Guides are excellent for younger students, and magazines such as "National Geographic" and "Scientific American" plus many

others for the secondary level. (See September GAME NEWS for a more thorough listing.) By all means, have a speaker's bureau; know and be knowledgeable on the current areas of biological and ecological interest, because every one of them is a controversial subject, usually with the government and/or industry on one side and the sportsmen on the other. By having speakers available to talk to groups, you will be able to much more effectively sell your side of the story. It is remarkable how over two decades ago the Philadelphia Chapter of the Izaak Walton League and other groups spoke out against the proposed involvement of the Delaware River into a large megaloptic recreation area. It seems somewhat late that after more than 20 years the government has finally decided to take an additional look at it.

Most interesting to the school administrator is the fact that teachers can instruct groups in a subject, and teach it well, without being aware of new materials which would simplify their job. Costs to the district keep the new aids from wide distribution. An excellent idea for the sportsman, either through his organization or as an individual, is to provide guides for the teaching of outdoor education, courses of study, and curriculum materials which can be used in local classrooms.

Several excellent series of materials available today come to mind. One is William B. Stapp's "Integrating Conservation and Outdoor Education into the Curriculum," Burgess Publishing Co., Minneapolis, Minn. 55415. Another is "People and Their Environment," an 8-volume curriculum improvement guide put out by the South Carolina Conservation Curriculum Project, a tremendous tome of information.

We have at our disposal here within the Commonwealth an excellent office dedicated to disseminating information relating to environmental education to the classroom teacher. Two advisers from the Department of Education, Bob Schwille and Eleanor Bennett, are eager to help anyone interested. Contact either at 525 Education Building, Harrisburg 17120.

Last but not least, have your local school superintendent provide you, the sportsman, with his copy of the AASA yearbook entitled "Conservation in the People's Hands." If nothing else convinces you of the need for your involvement through the science and social studies, language, arts, mathematics, and all other areas of the education, this book will be the clincher.

Next month I will attempt to bring to you the ways in which the sportsmen in Pennsylvania can become involved in social studies issues as they are presented in our Pennsylvania schools.

This is the second of three articles by H. Francis Rosen, a superintendent of schools in the northeastern part of the state. Mr. Rosen's first article appeared in the September GAME NEWS.

Follow-up On Sassafras

An article in our July issue said that sassafras oil is used for flavoring, and that "root chips may be purchased for brewing tea." This was accepted information when written, but may not be correct now. The federal Food and Drug Administration recently clarified a rule limiting the sale of sassafras products. They said, "The quantity of safrole known to be present in sassafras is such that consumption of sassafras in any food form, including sassafras tea, has not proved to be safe."



Sometimes It's Pleasant to Look Back to the Early Days and the Joys of . . .

COTTONTAIL HUNTING

By Byron W. Dalrymple

LAST YEAR ON a western trip I bagged a real eye-popper of a mule deer. After it was dressed out I walked back a half mile to where I had parked my four-wheel drive, and on the way, crossing a flat of yellow grass and scattered low bushes, I flushed a cottontail from its form.

They're not common in that country. I was puffing and I paused to blow and watched the little rabbit bounce away and finally halt to look around. There was a curious excitement within me and for a moment I simply felt it without turning my mind to why. Here I had just collected an unusually good mule deer, yet some thrill from a long-buried consciousness coursed through me at the mere sight of a cottontail.

Suddenly I wasn't at that place at all, or that time. I was sitting in class, in the sixth grade, the teacher was talking to the class but I wasn't listening. For that time in history the school, a new one, was quite unusual. It had two floors. It was built on the edge of a very small town. Farm fields surrounded it, and right across the country road from its front there was a small red willow swale.

Now in winter snow lay across the farms and piled up among the leafless red willows. It made odd black and white forms of the scattered stumps in the swale. I was in a room on the second floor and could look not only across the swale but also from that vantage point actually into it from above. As class started I had watched two men with a small hound come down the road, climb over the fence and take stands at the edge of the swale. The hound snuffed around briefly, then let out a bawl and was off.

Talk about high drama to a kid! Especially a country kid cooped up in a school room. I could see the hound running and I could get occasional glimpses of the rabbit circling. The rabbit left the swale

on the side out of view of the hunters, made several broad jumps and turned and came back in. The dog, hot in pursuit, checked and fumbled around trying to find the track. Meanwhile the rabbit sneaked into a clump of grass and willows and disappeared.

But soon the hound had worked this out. The two men moved a short distance into the swale. The dog jumped the rabbit again and it streaked along the edge. Unseen, it was easily within range of the guns, and the hunters were ready. But the rabbit cut adeptly to the right and then back left and went behind them as the dog came head on at them.

I jumped up from my desk and yelled, "Behind you!"

As If They'd Heard Me

I saw the hunters turn just as if they'd heard me. One of them shot. Snow flew. The rabbit raced on into the confusion of the willows—and I was suddenly aware that my view had been blocked. I looked up into a glowering face that had none of the joys of rabbit hunting inscribed on it, a face that showed no understanding whatever of the tremendous excitement that could overcome a country kid occupying a choice seat at such a show.

The bad part of it is blurry. But I do remember being pressed in front of everybody to explain—"And you'd better, young man!"—why I paid no mind to a lesson about long division but got so excited watching a couple of fool men who should be home doing proper work fiddling away valuable time chasing a rabbit with a dog. I remember being embarrassed, and totally frustrated, kicking my desk leg as an outlet and keeping my eyes aimed at the floor.

Finally I said in a weak voice, "If I got to explain it, I guess there ain't no way to make you understand."

The other kids laughed. I was sent to stand in a corner facing the wall, and I can still hear that teacher saying, "And if you say 'ain't' once more you'll stay there all day!"

Standing out there in mule deer country, recalling that long-ago incident, I found myself chuckling. And I also reflected that just the memory of the chase among the red willows was still strong enough to bring welling up a greater excitement than I had felt in taking the big buck. Part of that, I'm sure, is because I was a kid then, and impressions are deeply etched during those years. Few experiences of fruitful happiness in childhood are complicated. Simple pleasures can be alive with drama because experience is limited. My brother and I whittled out partially sharpened sassafras sticks and pitched them at rotten apples lying beneath a tree. It was fun. Today my grandchildren wind up complicated toys that run all over and come back, while lights flash.

Yet the mere fact of boyhood and cottontails coming together to produce flashing lights doesn't quite account for the total appeal of rabbit hunting as boyhood passes. Thousands of grown men who never hunted cottontails when they were kids today avidly attend that simple pleasure. Probably it is the ingrained and inherited love of the chase. Nor does the creature leading the chase have to be large or

SNAPSHOT taken by GAME NEWS editor shows his father, Bob Bell, with his L. C. Smith double, Sport and some cottontails taken in Frosty Valley near Danville, in the mid-'40s.



dangerous. I have hunted bobcats and coyotes and on one occasion in Mississippi deer with hounds, and have called up mountain lions. Yet I still think a rabbit puts on a better show and turns out just as much crystal pure excitement in the process.

Perhaps the grownups who hunt rabbits now but didn't have the opportunity as youngsters will agree with that. However, I have to submit that starting at an early age leaves one the best memories, for nothing lies quite so pleasantly in the mind of an adult as the heady and happy memories of boyhood. Where we lived, out in the country on a small farm, my brother and I knew every foot of our surroundings and what lived where—which was mostly rabbits. It was a different kind of countryside by far than today. Automobiles were few. Everyone walked or used a horse and buggy, or team and wagon. Wire fences were as scarce as autos. Fences were made of rails laid in the traditional zig-zag, and some, even, were made from pulled pine stumps dragged into a line and tilted on edge so the tangle of huge roots made an impenetrable barrier.

Talk about marvelous places for cottontails! A farmer couldn't till land right up to fences of that sort, of course. There were sumac patches in the corners, scattered small thickets of wild plums or witch hazel in the zigs and zags. There were also patches of cover galore right out in the fields. The government hadn't got around yet to urging, and helping, farmers ruin their land by draining moist places, killing every bush, channelizing creeks and rivers. There were small catholes, so-called then, of marsh grass and cattails, patches of brush, pussy willow, red willow and others. The fields themselves weren't turned over the instant a crop was was taken; hay was not shaved close to the ground; corn was put into shocks, by hand; every small farm had its woodlot. Cottontails will never have a paradise like that again.

My brother and I weren't allowed as small fry to have a gun. Besides the safety factor, it was not affordable. We whittled out slingshots. A neighbor who had the first automobile in our country gave us some strips from a blown inner tube. We selected smooth pebbles for ammunition. We practiced diligently. And the talk that went on! We had rabbits hung up on mother's clothes line until not another would fit—as we practiced, that is.

THIRTY YEARS AFTER THE previous photo was taken, PGN editor Bob Bell carries same L. C. Smith after rabbits in Cumberland County, on hunt with John Plowman.



The fact was, we weren't really very good at it at all. But we knew how to go about hunting. On sunny days of fall and winter, rabbits would sneak out of the fencerows and swales and move out to make basking forms in the hay stubble. By criss-crossing such places, on our and neighboring farms, we could flush out plenty of them.

It was not easy. They'd sit so snug you had to just about step on them. We learned that if we were over-eager and walked fast, we flushed few. Slow going—and it's just the same today—was the way to find them without a dog. In fact, we had an old mongrel black farm dog named Jim, a mixture that people called a "coalie." But we tied Jim when we went into the stubble because he'd race around and put the cottontails out before we could get close.

I remember once I spotted one some distance ahead, hunched down and hiding. My heart was thumping as I got my slingshot ready. Carefully I moved closer, one step—another—another. And finally, *whammo*. The pebble whopped the ground right beside the rabbit. It stayed immobile. I tried again. Another miss. With growing anguish I could visualize failure. Here I was at last within mere feet of my long-prized quarry. How I wanted to belt that bunny and proudly carry it, to brag to my brother, show it off to my mother, and repeat a hundred times the story of my prowess as we ate it, cooked in that utterly delicious way my mother had of fixing them.

On the fourth shot the rabbit leaped from its form and streaked away, untouched. There was a lump growing in my throat. But I marched on, telling myself I was a hunter and had to accept such disappointments. I also reminded myself not to tell it just how it was, to my brother, who was over in the next field. I had *hit* the rabbit—yes, that's how it was—I had hit it every time, but not quite hard enough to stun it. But of course I knew what he'd do. He'd laugh and say, "Sure you did. How do you spell 'hit'—do you start it with an 'm,' maybe?" Perhaps it would be better to just keep my mouth shut.

Later on, when we owned a gun, things were different, but not much right away. The gun was a 1905 Savage single shot 22 passed down from an uncle my brother and I had never seen. After rigorous warnings about gun dangers from our parents, we were allowed to tramp the fields with the gun, taking turns. Hit or miss, after one shot we traded. This worked pretty well. We kept on hunting during the middle of the day when it was sunny in winter. We had learned to prowl very slowly till we spotted a rabbit in its form, and now we had a better chance by far than with the slingshot. We bagged a fair number.

Just Lucky

Presently, feeling mighty smart about our prowess, we began letting old Jim the dog go with us. He didn't really trail. He'd snuffle around, bumble into a rabbit, bark and chase it as far as he could see it. We started taking running shots, and my brother finally made one good. He was hard to live with for some time after that—until he had missed enough so I could badger him into admitting he'd just been lucky.

I've always remembered an incident during this period, for somehow it had never occurred to us that serious accidents happened to wildlife. Old Jim jumped a cottontail and pressed it hard for a few seconds. We were in good view. The rabbit made a wild, long leap across a wide ditch. When it hit the ground it suddenly came tumbling and kicking back down and the dog caught it. We got it away from him quickly. Somehow on the long jump the rabbit had broken a hind leg.

I remember an odd emotion as we looked at it and dispatched it. Hunting and fair shooting was all right, but this was distasteful. A creature perfectly tuned to its surroundings



Photo by Chris Dolnack

QUITE OFTEN it's the quiet moments of a hunt, when a father and son have a chance to talk and maybe share a tidbit with their dog, that are remembered longest. Somehow, cottontail hunts give these opportunities.

and needs in life had not been fairly caught by a predator, or taken in a fair chase or by hunter expertise. It had had an unfortunate experience. I'd rather have seen it get away. Obviously we now had to take it home and use the meat. But I recall that neither of us said much, going in. There was no argument about who'd get to carry the game, and no bragging to our parents about that kill.

It is interesting, looking so far back, to realize how vividly some of the ones we didn't bring in are remembered, and with what excitement. We had a neighbor down the road named Mr. Henry. He allowed us to hunt on his place. By now we had a small beagle hound of doubtful ancestry, and had added a single shot 12-gauge that kicked unmercifully. This was a comic situation. Both of us wanted to carry the shotgun, because we figured we could nail the quarry almost for sure. Yet each time we switched guns the one getting the shotgun accepted it with mixed emotions. We laughed many a time in later years about some of the incidents.

For instance, one morning a rabbit jumped up and ran straight away across an open field. My brother had the shotgun. He pulled up, let down, pulled up again. By then the rabbit was long gone.

"Why didn't you shoot?" I asked angrily. He'd had his chance and now I'd have to wait until we found another rabbit and he had actually taken a shot.

He said without looking at me, "I just couldn't get aimed at it right."

"Yeah, yeah!"

"Well," he blurted, "*you* didn't shoot this thing three times yesterday like I did!"

The trouble, I knew, was not in the nature of the shot presented but in the soreness of the blue welts on his arm!

There was one wise old rabbit living on the edge of Mr. Henry's corn field that I'm sure we ran with the beagle a dozen times. It was a big fellow, always was jumped in the same general area, and the more we ran it and failed to get it, the smarter it got. I realize that rabbits aren't supposed to have any great intelligence, but this one at least had lived long enough to learn its craft.

Merry Round

There was the day, with snow on the ground, when we jumped it and the dog took it a merry round or two across the cornfield, where the shocks gave good dodging places. Then down into the nearby swale and through the woodlot, and right back to where it had been started. This, as all cottontail hunters know, is the ruse to find out if the dog is still on the trail.

I was standing on a slope from which vantage point I could see all across the cornfield. I watched the rabbit peel out across the field at sizzling speed, in long leaps. At the first corn shock it circled round and round possibly a half dozen times,

then switched ends and circled the shock several times the other way. Just that much was an amazing display. But now it paused a second and then made an astonishing single leap straight out away from the shock, and hit the ground running hard. This of course left that long jump width with no track.

I would have bet that now the rabbit would hole up. I knew where one hole was, and ran for the spot. By the time I got there a fresh track, sure enough, led into the burrow. Meanwhile the dog had hit a dead end at the corn shock. Instead of going to it, I watched with kid curiosity. The little hound puzzled away at the maze, back and forth, round and round. It even thrust its nose inside the shock. Finally in good hunter form it began to circle and of course eventually picked up the track and bawled along straight to the hole in which the sly old cottontail had taken refuge. I've often suspected that such subterfuge is utilized by rabbits to keep a dog—hopefully—from locating the place of final safety. At any rate, so far as we knew we never did pot that particular rabbit, and perhaps for that reason the memories of our chases after it have always stayed especially bright.

One rabbit I did get, however, my brother and I still laugh about whenever we get together. It wasn't so funny to me at the time. It was the first rabbit bagged with that single shot 12-gauge, and in fact the first shot we had fired from the gun. We had acquired it as a rusty gift from an old codger in our area who claimed he was getting too old to shoot it any longer. Later we suspected his bones were getting too brittle to argue with its authority.

There was a cottontail we had run a couple of times in a small swale just a short distance from our old farmhouse. We argued over who'd be first to shoot the new gun. My brother, a couple of years older, seemed as I later reconstructed it to give in rather easily. We went to the swale and we got the rabbit going. The dog pushed it out into a field and across and then I could hear the chase turning back. There was a partly burned stump out in the swale, with a hole under it. Twice before this rabbit—or some rabbit anyway—had circled and come right to that stump. So, I climbed atop it and waited, the heavy old gun halfway up and ready for him.

There was snow on the ground. The stump top was uneven and slippery. Distantly the beagle was bawling. I knew the quarry would be well out ahead and then sure enough here it came. Just hopping casually, right at me. I raised the gun and *ker-blam!* Pole-axed, my feet shot out from under me, I pretzeled in midair and came down on my back in the snow and brush with a thump. In this grand flight the shotgun had also flown, coming to rest with only its outline showing on top of the snow where it lay buried. My ears were ringing, and I was hurting all over. And to make it worse my brother, who had stood only a few feet away, was bending over me utterly out of control in a gale of laughter.

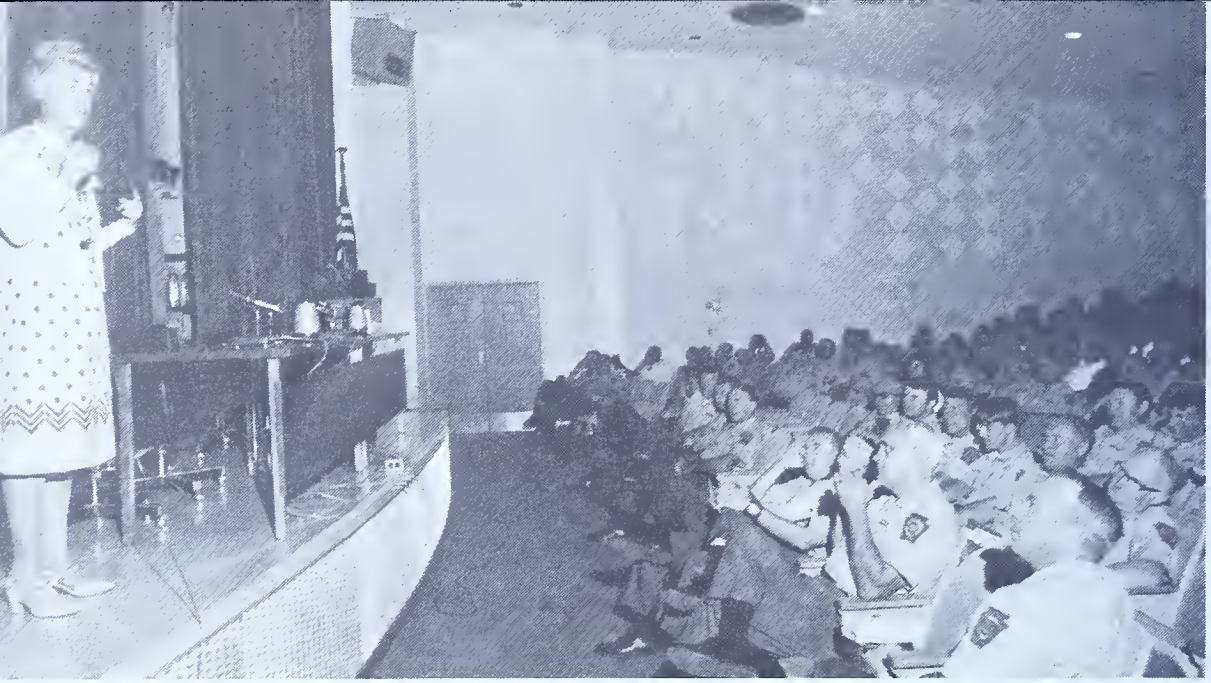
I jumped up in furious anger, ready to fight. He couldn't quit laughing. "It got you both," he was hollering. "You oughta feel proud of that shot!"

Rabbit and Headache

Indeed, I had collected the rabbit. Plus a headache. Plus a host of other aches and pains. I didn't want to tell him that, skittish of the gun, I had held it out away from my shoulder. But I did have a flash of brilliant insight.

"It's your turn next," I said with all the seriousness I could muster, "And I'll give you some good advice. Don't hold it tight like I did—hold it out aways."

Inwardly, headache and mashed shoulder and all, I was gloating. Such were the joys of cottontail hunting when I was a kid. How fine it is that they have not changed much to this day.



Statewide Training Conference

By Chuck Fergus
GAME NEWS Staff Writer

FROM JULY 21 to 24, the Game Commission held a training conference for its personnel at the J. Orvis Keller Conference Center at Penn State University. Over 250 game protectors, land managers, game biologists, foresters, game farm superintendents and Division office and Harrisburg office staff members attended.



JOHN FULBRIGHT, Jr., of the Dept. of the Interior, left, discusses text of his speech with Glenn L. Bowers, PGC Executive Director.

The purpose of the conference was to better educate all Game Commission personnel—to inform them of changes in the organization and developments in fields such as wildlife management, law enforcement and forestry, and to promote and improve communications.

In his keynote address, Daniel A. Poole, president of the Wildlife Management Institute, said that the Pennsylvania Game Commission and other conservation departments across the nation face many challenges today. These include strong anti-hunting sentiment, lack of communication between conservation agencies and the public, and the possibility of stagnating—resting on past achievements and not forging ahead. The in-service training conference was designed to improve the capabilities of Game Commission employes in these areas and to provide on-the-job education.

Communications and public rela-





tions were featured in speeches such as "Anti-hunting Sentiment," "Concepts in Communications," "Functions of the Organized Sportsmen," "Title VI Compliance," and "Are We Communicating?" The following explored wildlife management concepts: "Ruffed Grouse Management," "Genetical Aspects of Wildlife Management," "Small Game Harvest Survey," "Prescribed Burning as a Wildlife Management Tool," and "The Impact of Forest Defoliation on Wildlife." Other topics included "Hunting Health Hazards," "Psychology of Law Enforcement," and "Minerals and Rights-of-Way on State Game Lands." Both Game Commission personnel and individuals from other agencies made presentations. Speakers came from as far away as Minnesota and Illinois.

Also part of the program was the annual PGC statewide revolver competition, held at nearby Scotia Range on SGL 176. Ned Weston, DGP in Butler County, came in first in the bullseye course with a score of 285. George Mock, Centre County DGP, placed second with a 283 score. In the practical police course, four shooters scored 147. They were: Weston, Mock, Donald Parr (northwest division Land Manager) and George Gibson, Erie County DGP. Weston was declared winner of the police course for putting the most shots in the tie-breaking X-ring.

Conferences like the statewide in-service training program inform and educate an organization's employees. These increase efficiency which, in the end, results in better services to Pennsylvania's people and wildlife.






N. Rosato

Everything That Goes Up . . .

By Ray Beck

MY OLD COON dog, Snuffy, has reached the age where he doesn't light out for the second ridge over when I let him out of the truck anymore, and I've got to the age where I'm darn glad of it. We amble down through the woods a half mile or so, and if he doesn't strike a red-hot track, we go back to the truck and try somewhere else. He could follow a cold trail if he wanted to, but he is too considerate of me for that. He knows that by the time he caught up with the coon, it might be miles from the truck, and I would have to walk all the way back lugging that heavy critter.

Some people laugh when I tell them this, but that old dog really worries about me. When he barks "treed," if I'm not there within 10 minutes, he comes back to see if I might have fallen and broken a leg or something.

I'm willing to admit that he doesn't look much like a coonhound, but I resent it when someone says he doesn't look much like a dog, either. Why, you can see characteristics of at least 15 distinct breeds in him.

Last fall, with the price of coon hides going way up, it looked like Snuffy and I were going to have some competition. A guy who lives a couple of miles from here sent away and bought a pair of trained black-and-tans.

It was so downright disgusting the way he was always waving their pedigrees around like a new grandpaw showing baby pictures.

"Just look here," he'd say, jabbing a stubby finger at some fine print that I couldn't read without my glasses. "Sired by Kateeze Kennels Marmaluke, himself, and their mother was Ouachita Winnie, out of Stubb's Orphan Annie, by Bladington, who was a half-brother of Wabash King. I'll bet there isn't another coonhound in this end of the state with a pedigree like that."

When hunting season started, it got even worse. Every time I stopped at the filling station for gasoline, somebody would ask, "How many coons did you get last night, Beck?"

I'd tell him two, maybe three, feeling Snuffy and I had made a pretty good night's wages, and then he'd say, "They got five with the black-and-tans."

One night as Snuffy and I were going down Beaver Creek, I saw some lights coming up the other side. It was the fellow with the black-and-tans, and a couple of buddies. When I saw that they didn't have anything either, I crossed over to talk with them.

"You might as well go home," said the B&Ts' owner. "That's what we're gonna do. We haven't had a chase tonight, and when these hounds of mine can't find a track, coons just aren't runnin'. I'll bet they don't come out until after the moon goes down toward morning—"

Just then, Snuffy barked treed.

Beat to Tree

The black-and-tans beat us to the tree, but not by very much. When we got there the three dogs were bellowing their heads off, up a white oak sapling.

"Grab the hounds," roared the black-and-tans' owner to his friends, kicking indiscriminately at the three dogs. "His mutt treed a possum. I paid four hundred dollars apiece for straight cooners and that cur gets them started on possums!"

He added a few rude remarks to Snuffy, chiefly about his ancestry. His comments were unquestionably true, but he needn't have brought them up. Poor Snuffy is a sensitive dog, and he

hadn't been spoken to like that since the time he made a bed in a clothes basket full of freshly laundered lace curtains.

After they had gone, I shot the possum out of the tree and petted Snuffy so he wouldn't think I objected to him treeing possums. That would be like passing up one dollar bills on the street because you are looking for fives.



ONE OF THE HOUNDS took a few sniffs and let out a puzzled bawl. The other came over, snorted a time or two, agreed that it smelled like a coon, and they were off.

A week later I was in Hiwiller's barber shop in Knox, getting my fall haircut, when the fellow with the black-and-tans come in. "How's the Great Possum Hunter?" he asked. He fished in his shirt pocket, and pulled out an advertisement for dog training scent. "Here, send and get a bottle of this stuff, and maybe you can get your mutt started on coons. I'll bet he doesn't know what a coon track smells like. Har. Har. Har."

For the next couple of weeks, when anybody asked how the coon hunting was, I would sadly admit that I wasn't doing too good. Then I would launch into an account about a smart old coon that made monkeys out of Snuffy and me every time we struck its track. I figured the story would get back to the owner of the black-and-tans. Meanwhile, I ordered a bottle of that training scent.

We met in the S & D Bar the night after Thanksgiving. "I hear you haven't been doing so good with your coon hunting," he said, as condescendingly as though he had just seen me shoot at a sitting duck and miss.

"I've been having a little trouble with one," I admitted. "My dog trees it all right, but when I get there it's gone. I just can't understand it."

"It's running out on a limb and jumping off," he explained smugly. "I'll bet it wouldn't fool my black-and-tans that way."

"Shake on it," I said, grabbing him by the hand and pumping it like a politician running for re-election.

"On what?" he asked, puzzled like.

"On your bet. You just bet that coon couldn't fool your black-and-tans. You aren't going to try to weasel out of it already, are you?"

"All right," he said, "I'll bet you that coon can't lose my hounds if they strike its track. They'll either get it or run it in a hole."

"I don't want your money," I told him, "but my dog Snuffy is getting along in years, and I'd like a pup of his. I sort of fancy that black-and-tan female of yours as the mammy. What do you say, we take your hounds out the first warm night, and if that coon loses them, we breed her to Snuffy and I get a pup?"

"You're crazy!" he exploded. "My black-and-tans are pureblooded and registered. That mutt of yours is a mixture of everything from chihuahua to sled dog."

"But I thought you were sure of your dogs getting that coon," I said, with a wink at some of the fellows who had gathered around.

"They'll get it, all right," he snorted, "but remember, a bet works two ways. What do I get when they do?"

"Well," I said, "it's always been customary for the daddy's owner to get the pick of the litter for his dog's services. I'll bet that one against the

one you're betting me, which makes the stakes even. If your hounds get that coon, you can keep all the pups."

While he was trying to figure that out, I finished my beer and left.

I had originally thought about soaking an old sock in that training scent, dragging it around through the woods, and winding up at a tree in the middle of an open field, but that wouldn't have been honest. A couple years back, a big, one-eyed tomcat come to my place, and I let him stay, thinking he'd catch rats around the barn. However, his motto seems to be "Live and let live." All he's interested in is fresh milk and romance. Just before dark, I popped him into a sack and hauled him down to the creek. He didn't mind being in the sack, but when I opened that bottle of training scent he went crazy.

It was real powerful stuff. Smelled like a whole tree full of coons, all badly in need of a bath. I just wanted to put a little dab on each of his feet, but it was like trying to file a buzz saw while it was running. We wound up by splitting the bottle, about half on each of us. When I let him go, he lit out like he'd been baptized with High Life.

I didn't want the black-and-tans treeing me, so I went home and rubbed horse liniment on to kill the smell—the brand they advertise is used on 85% of the winners. If I hadn't believed their claims before, it would've sure convinced me. When it got in those cat scratches, I could have placed in the Derby myself.

About 8 o'clock we started out; me in my pickup, the guy with the black-and-tans in his Jeep, and two carloads of fellows from town. I walked them around for half an hour to make it look good, and then led them to where I had released the cat.

One of the hounds took a few sniffs and let out a sort of puzzled bawl. The other came over, snorted a time or two and agreed that it smelled like coon, and they were off.

When my dog Snuffy finds a track, he has brains enough to keep his mouth shut until he has something treed. Then he barks, "Come and get it, boss." Those black-and-tans started yelling the minute they struck the track.

They say a cat has a sense of direction that enables it to find its way home from strange territory, but I doubt that the territory was strange to Tom. He has courted all over Beaver Township. He couldn't have laid a straighter course for my barn if he had been a Boy Scout with a map and compass.

After the Dogs!

We tore after the dogs. The others gained on me by splashing through Stoney Run while I went a hundred yards upstream to a footlog, but I caught up while they were floundering around in a cattail swamp on the other side. Somebody blundered into a half-acre crab apple thicket, and was yelling for a light. The hounds' bawls changed to an excited tree bark, and the younger fellows started passing me again.

By the time I got to the tree, everybody was there but the fellow back in the crab apples. The tree was a big, bushy shingle oak, still full of leaves, and half a dozen flashlights were playing over it.

Somebody yelled, "Hold it—there he is!"

I darn near swallowed my tobacco. Had the black-and-tans really been running a coon, after Snuffy and I had spent every night for two weeks cleaning them out of that area? Then came the sweetest sound I've heard since the quitting whistle blew on the day I retired.

"Me-Yow-w-w."

"There's something fishy about this whole thing," said the black-and-tans' owner as he led his crestfallen dogs back to the road. "The bet is off."

"That's mighty decent of you," I told him. "I sure appreciate it. I don't like to badmouth another man's dogs, but I just wouldn't want a pup whose mammy couldn't tell a coon's track from a tom cat's."





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DGP's Turn Teac

EACH MAY, district game protectors of the
devote a significant part of their energy
1600 elementary school children in some of th
ties of the Game Commission. Topics covere
land management, trapping, forestry, the Gan
cation, survival methods, safe gun handling, v
etc. A shooting demonstration is also part of
which takes place at the Ross Leffler School
Brockway.

By CIA Fre

DGP Al Pedder tells how guns work mechanically before putting on shooting demonstration for Punxsutawney Area youngsters.

OIL CITY AREA youths are fascinated by furs during DGP Bill Lee's talk, below. Right, Forester Bill Slusser tells other Oil City students of the inter-relationship of trees and wildlife.







**VERS discusses survival meth-
kway Area students. This school
g part in program for 24 years.**





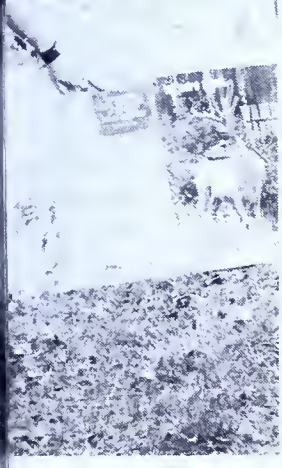
DGP Gordon Couillard exposes Valley Grove Area youngsters to "What Do You See?" phase of hunter education part of program.

S

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CRANBERRY AREA students are enthralled by DGP Pedder's instruction in snake identification. PGC Education Day is an annual event at this school.



FIELD NOTES

There When Needed

SOMERSET COUNTY — Answering a shooting complaint in the Beaver Dam Creek and Stoney Creek sections, one of my deputies and a Waterways Patrolman proceeded in separate cars to the area. These officers used CB radios to decide the sections they would investigate. Arriving at these areas, they found the roads blocked by other CB owners. It seems that CB friends had heard the officers' instructions to one another and had parked their vehicles on the dirt roads, sealing off all escape routes from these areas.—District Game Protector J. Burns, Central City.



Neighborhood Nibbler

SNYDER COUNTY — Deputy Willow recently handled a rabbit damage complaint by telling a local gardner about a chemical repellant he could use. The gardener had no luck with the chemicals; his beans just kept disappearing. One night the fellow checked his garden. He found no rabbits—only a young neighborhood boy picking a basket of string beans. —District Game Protector D. L. Myers, Selinsgrove.

Surprise!

WESTMORELAND COUNTY — Normally you can trust a fellow Game Protector, but I'm not so sure anymore. I was with DGP Barry Moore, shortly after he transferred to Westmoreland County, investigating a violation. We were driving along in his car discussing current events, etc., when I happened to glance down on the floor and saw a large snake crawling out between my feet. Well, Westmoreland County was almost short one Game Protector! I don't think my heart is back in place yet. Barry will have the prints of two field boots on his windshield for quite some time to come. It was just a harmless blacksnake but still enough to give a man heart failure.—DGP R. D. Buss, New Stanton.

He's the Dandy

CLARION COUNTY — Recently I spoke on hawks and owls to a group of Girl Scouts. One question caught me off guard: "Why is the snowy owl the only one allowed to wear a mustache?"—District Game Protector J. G. Bowers, Knox.

Just a Conversation

CUMBERLAND COUNTY — A woman called to tell me that a fox had come into her yard, where her pet dog was lying. Dog and fox looked at each other and began barking. She came out and shouted at the barking duo; the fox left in high gear, and the dog went back to his nap.—District Game Protector J. P. Filkosky, Mechanicsburg.

Fast and Furious Hour

CENTRE COUNTY — On one day this month the following events occurred during a single one-hour period. While in our way to interview a suspect in a jacklighting case, Deputy Coder and I got behind a slow-moving Jeep on a back road. We suspected that the driver was road hunting. Sure enough, we heard a shot and saw the blast come through the driver's side door of the Jeep. The driver had been carrying a loaded 22-250 across his lap, and when he saw us coming he tried to unload the rifle while driving down the road. The result was a two-inch hole through the side of the Jeep, a hole in the driver's arm from a bullet fragment, and paint chips knocked off the hood of a car which was approaching from the opposite direction when the rifle discharged. After taking care of the loaded gun incident, we continued on to investigate the jacklighting case. While interviewing the defendant, a friend of this man actually asked me why there weren't as many deer in the area as there used to be! Our investigation complete, Deputy Coder and I headed home. But on the way we rounded a curve in the road and saw one of the passengers in a car that was stopped ahead of us hanging out of a window and loading a 22 rifle. The man loaded the gun and aimed it out the window before he spotted us. Under questioning, he told me that he was planning on shooting a butterfly. After hearing that the fine would be $10, one of the other occupants of the vehicle remarked that the price of meat was going up. My only question is, what's going to happen when my *busy season* arrives? —District Game Protector G. F. Mock, Coburn.

Chipmunk Caller

TRAINING SCHOOL — Trainee John Shutter has recently been experimenting with the stem of his pipe as a turkey call. We won't recommend it for gobblers, but it works with chipmunks!—Trainee W. Wasserman.



Among the Ears

Recently, Clair Miller of Valencia was blaming raccoons and woodchucks for extensive damage to his sweetcorn field. After hours of close vigilance, Clair apprehended the culprit—a red fox. Since then, he has had no more problems.—Southwest Division Supervisor D. C. Madl, Ligonier.

Divebombing Birdies

ADAMS COUNTY—A pair of overprotective nesting mockingbirds didn't exactly bring traffic to a standstill in Gettysburg, but their divebombing did make one family a little dubious about going outside, hindered their mail deliveries, kept the neighbor's dog out of their yard, etc.—District Game Protector J. J. Troutman, New Oxford.

Not Hungry

BERKS COUNTY — While visiting a taxidermist, I was shown a number of unusually colored pheasants he had received for mounting the past season. One white pheasant was hard to skin. After some experimentation he was finally able to finish it satisfactorily. It had been found in a home freezer after 16 years. The owner killed it before he went into the service and it had been overlooked all these years.—District Game Protector J. A. Leiendecker, Reading.

On the Perimeter

DAUPHIN COUNTY — At the recent Game Commission Training Conference in State College, the group was addressed by Dr. Edward Kozicky of Winchester-Western. In part of his speech, Dr. Kozicky touched on personal motivations that make people hunt. He once asked a friend of his, an inveterate southern quail hunter, ""Would you go to hell to hunt quail in the fall?" His friend replied, "No, sir," then added as an afterthought, "But I'd probably mess around the edge till I fell in."—District Game Protector J. E. Schweitzer, Hummelstown.



Still Around This Year

FRANKLIN COUNTY — Richard Forrest, of Booneboro, Md., related the following experience which happened during the 1974 small game season. On a ringneck hunt, the dogs pointed and as Forrest and a hunting companion approached, a ringneck jumped into the air, fell, and started flopping around on the ground. The bird started running and falling, so the two hunters decided not to shoot, as the bird was apparently injured and couldn't fly. The men figured the dogs would catch the bird. After the bird ran out of shotgun range, it took to the air and flew away without any difficulty. I told Richard that it must have been one of Pennsylvania's educated birds.—District Game Protector R. Schmuck, Greencastle.

The Hunter's Home

CLEARFIELD COUNTY — Local hunter "Bing" Shaffer, of Rockton, who has trekked north and west in pursuit of his sport, will still tell you that Penn's Woods is his favorite hunting ground. Why? Well, take last season for example. Bing scored on a nice buck, a double-bearded 20-pound turkey and a bear that tipped the scales at 426 pounds. The great part about it was that all three trophies were taken within just a few miles of his home.—District Game Protector G. J. Zeidler, Rockton.

Inconsiderate Idiot

SCHUYLKILL COUNTY—In July, I got a phone call from Mrs. Kopla, a farm-game cooperator in the Lewistown Valley area. It seems that some inconsiderate idiot purposely girdled several trees on their property and sprayed them with a chemical substance that caused them to wither and die. This incident occurred where their property adjoins State Game Lands 257 at the base of Wildcat Mountain. Their first reaction was to post the property, but after thinking it over they decided this would be no solution in the future. I hope that any sportsman who observes property being damaged will report it to the landowner or the Game Commission. —District Game Protector S. L. Opet, Tamaqua.

Another Country Heard From

DIVISION OFFICE—After months of answering letters and other requests concerning the sixteenth class for Game Conservation Officers, the class got underway on July 14 after receiving over 1900 applications. I thought my letter writing was over for awhile . . . but wrong again! Two weeks later a request for information was received from a native of Latronico, Italy. I guess our news releases aren't used by all the news media.—Conservation Information Assistant J. A. Badger, Ligonier, Pennsylvania.

Road Indications

HUNTINGDON COUNTY – If the number of highway killed deer in the Southcentral Division is any indication, we should have a bumper crop for harvesting this fall. Reports from our game protectors showed that they disposed of 1139 deer in a six-month period.—Law Enforcement Assistant J. D. Moyle, Alexandria.

Experiment Brought to End

BUCKS COUNTY – Earl Shearer, a member of the Springtown Rod and Gun Club, reported that he had discovered a nest on Springtown Hill which contained both pheasant and wild turkey eggs. At first there were 10 pheasant and four turkey eggs in the nest. The pheasant soon abandoned the project in deference to the larger bird, which started incubation. Everyone was eager to see the outcome of this undertaking, but free-running dogs found the nest and left only four unbroken eggs and a handful of feathers.—District Game Protector W. J. Lockett, Perkasie.

Brockway Flyway?

TRAINING SCHOOL – With all the scientific research on migratory waterfowl, it's surprising that nothing can be found on one of the most interesting of species—the migratory Game Conservation Officer Trainee. This species appears mysteriously every two to three years in the Brockway area and for approximately 50 weeks nests in a spot some seven miles northwest of the city. The species has an odd characteristic of dispersing across the state each Friday and Saturday in roughly two equal flights and returning at random on Sunday evening. Even though the flock is quite small, the Game Commission is quite certain that the species is in no danger of extinction. —Trainee G. A. O'Hara.



In No Danger

McKEAN COUNTY – Last August I checked a woodchuck hunter sitting in a hayfield. He told me he had seen a young red fox at the edge of the field, and just then the fox came back out of the brush. The hunter had not seen any woodchucks, so he decided to take a shot at the fox, which was about 400 yards away. He fired and the bullet struck several yards short of its target. The young fox ran to the spot where the bullet had hit to investigate. The hunter fired several more times at the fox, and each time the critter would run to the place where the shot had hit to check things out. When I left the scene, the fox was still running around, as the hunter had not yet come close to him.—District Game Protector J. E. Rankin, Port Allegany.

Merlin McUtech

CUMBERLAND COUNTY – As if by a prearranged signal, all the raccoons in the country have descended on my district. I've been deluged by complaints from both farmers and city dwellers of raccoons raiding garbage cans and sweet corn patches, and one morning I received five calls from farmers alone concerning this problem. Oh how I wish I had Merlin's magic wand at times like this.—District Game Protector E. F. Utech, Boiling Springs.

Up-Tight and Un-Tight

JUNIATA COUNTY – Over the past years, I've received many pointed remarks about the unsavory, cluttered condition of my auto. I was reflecting on this last July 31, the hottest day of the year. I had a roadkilled adult deer on the back bumper rack, a fawn in the back seat, a crippled (live) barn owl on the seat beside me, and was en route to pick up a corn-stealing raccoon. Now I ask you, how can you run a tight ship when you have passengers like these?—District Game Protector R. P. Shaffer, Mifflintown.

Keep Trying

TRAINING SCHOOL – Words of encouragement to the nearly 1900 applicants who recently applied for the Training School and were not accepted: "Keep trying." Maybe you will make it after several tries, as I did. It is worth the extra effort.—Trainee W. A. Sneath.



Cancelled Duck Stamping

BEDFORD COUNTY – While picking up my mail at the post office one day, I overheard a gentleman saying that he was not going to buy a duck stamp this year. When I asked him why, he said that he's been trying for a good many years and has yet to catch one to put it on.—District Game Protector B. L. Warner, Bedford.

It's Obvious, Brian

WESTMORELAND COUNTY—My two boys were playing on their grandmother's porch and pulled a piece of caulking from a big crack. Shortly, dozens of ants were coming from the crack, looking for their piece of roof. Grandmother was pulling weeds nearby, and the boys soon found a worm to play with. It wasn't long until they had both worm and ants together and decided to feed an ant to the worm. They weren't having much success and grandmother heard Barry tell Brian, "Turn the worm around, that's not the eating end."—District Game Protector B. Moore, Latrobe.

Sometimes It's All Worthwhile

While driving many miles in a marked car and in uniform, many hand gestures have been seen. Many farmers and other people simply wave a hand in greeting. A couple of years ago it was common for youths to put two fingers up in the peace sign. However, the nicest sign I've seen was from a little old lady in Coraopolis. She pointed to the deer on the side of my truck, folded her hands as in prayer and I could read her lips as she said, "God bless you." I had a very good day after that.—Land Manager R. B. Belding, Baden.

Call to Action

HUNTINGDON COUNTY – Now is the time for all good men to come to the aid of wildlife! Do your part for conservation, ecology and wildlife management. Contact your local game protector when you observe someone destroying part of *your* heritage, either by killing game out of season, littering, damaging property or allowing dogs to run at large during fawning season. If we all do our part, we can maintain what we have for our future generations.—District Game Protector E. Gallew, Alexandria.

CONSERVATION NEWS

By Ted Godshall

Fackler Retires

DANIEL H. FACKLER, chief of the Game Commission's division of administration since 1966, retired in July. Fackler had begun his conservation career in 1941 as a graduate of the third class of the commission's training school. His initial assignment was that of district game protector in York County, a position he held until 1960 except for three years of service in the U.S. Army during World War II and a year as resident instructor for the fifth class of student officers at the training school. He was named personnel officer in 1960 and administration chief in 1966. In the latter position he was responsible for the purchasing, data processing personnel, accounting and licensing functions of the Game Commission.



DANIEL H. FACKLER

Weston Top PGC Handgunner

District Game Protector W. Ned Weston is the 1975 Game Commission handgun shooting champion. Weston fired a 285 out of a possible 300 on the 25-yard bullseye course, and shot a 147/150 on the practical police course. Although three others equalled Weston's PPC score, the Butler County officer won the event with 17 shots in the X-ring, eight more than the runner-up.

Second in the bullseye competition, which is fired both right-handed and left-handed, was Centre County DGP George Mock, whose score was 283. In third place was Harry Nolf, the Southeast Division's law enforcement assistant, with a 281.

The other three shooters who fired 147s on the practical police course were Mock, Northwest Division Land Management Officer Don Parr, and Erie County District Game Protector George Gibson.

The practical police course firing is both right- and left-handed, all with a double-action revolver with a two-inch barrel, at distances of 7, 15 and 25 yards.

All firing was done at the Game Commission's Scotia Range located on State Game Lands 176 near State College.

Book Review . . .

Gun Digest, 30th Anniversary Edition

This edition celebrates John T. Amber's 25th anniversary as editor of **Gun Digest.** That in itself should make it something special, for there's little doubt that Amber is the country's top gun editor, with interests that cover the full range in the firearms field. As if to verify this, the 30th edition has unusually diversified contents. For instance, M. L. Brown's article is, we believe, truly unique, a first-time-ever presentation. Entitled "Firearms in Frontier America: the Economic Impact," it details the great influence firearms exerted on the complex economic, political and technological aspects of the colonies in the 1560-1800 period. This is the first of two parts, the second will appear in GD31. Technical articles include Wallace Labisky's "Buffered Shot Loads—the Ultimate Step," Lee Kennett's latest piece on proof marks, Robert Burmeister's "Best of the Military Lugers," and A. N. Weiner's "NDT—Non-Destructive Testing," which tells how neutron radiographs are used to discover defective materials in firearms. There is material for hunters, handloaders, handgunners, collectors, those interested in engraving, bluing and browning, and even an article on the Pennsylvania Commemorative Longrifle being built to celebrate the Bicentennial. In other words, as usual, there's a lot of stuff to interest anyone intrigued by firearms. (**Gun Digest,** ed. by John T. Amber, DBI Books, Inc., 540 Frontage Road, Northfield, Ill. 60093, 448 pp., large format, paperbound, $8.95.)

Waterfowl I.D. Booklet Given With Subscription

As long as our supply lasts, a copy of **Key to North American Waterfowl** will be given free with each 3-year subscription to GAME NEWS. This full-color, 32-page booklet identifies and gives much information on 62 species of ducks and geese. It is printed on "plastic" paper which makes it waterproof, impervious to oil and grease, and essentially tear-proof.

GAME NEWS

Enclosed find check or money order for $7.50 for a 3-year subscription to GAME NEWS. I understand I am to receive a free copy of **Key to North American Waterfowl** with this subscription.

☐ New ☐ Renewal

Key to North American Waterfowl may be purchased alone if desired. Price is $1.50, delivered. Check the following box if only this booklet is wanted. ☐

Name .....
(print plainly)

Address .....

City ..... State ..... Zip Code .....

Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pennsylvania 17120

25-Year Club

Pennsylvania Game Commission personnel have compiled an enviable record among public and conservation agencies for longevity of service. Few organizations in any area of endeavor can boast so many dedicated employes. The most recent PGC employes to complete 25 years of service are shown on this page.



Donald L. Croft
Forester IV
Camp Hill



Harvey A. Roberts
Deputy Executive Director
Harrisburg



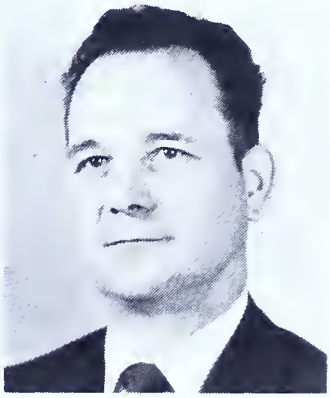
Keith C. Hinman
GCO IV
Mechanicsburg



Joseph Maholtz
LEA, Southwest Div.
Mt. Pleasant



Robert H. Myers
LEA, Northeast Div.
Sweet Valley



Charles M. Laird
Supervisor, Northcentral Div.
Jersey Shore

Donald G. Day
DGP, Susquehanna Co.
Hallstead

George W. Hodge
Asst. Sup., Western Game Farm
Cambridge Springs

Henry R. Pratt
Supt., Wild Waterfowl Farm
Meadville







Food Packaging Energy Costs

Industry may have wasted more energy just packaging the food on your dinner table than was actually spent producing it. According to a recent report by the Center for Science in the Public Interest, the fancy packaging of certain foods, such as soft drinks and some canned items, requires more energy than is spent getting them to the family table. The Center is a non-profit group based in Washington, D.C.

Aluminum and plastic containers—which take large amounts of energy to produce—are becoming more and more widely used, the report said, at the expense of glass, steel and paper packaging, which use less energy. The report calls throw-away aluminum cans and plastic milk bottles "great energy wasters," and recommends against throwaway glass bottles for the same reason.

Among the highest energy users are such processed foods as TV dinners, frozen prepared foods, flavorings and spreads, canned beverages and cooking oil sprays that come in aerosol cans. The report noted that returnable soft drink and beer bottles take additional energy to make, but are re-used an average of 15 times, so total energy requirements are much lower over a period of time.

The report also says Americans spend about 12 percent of their total energy output on growing, processing and packing food.

—National Wildlife Federation
Conservation News

Long Top Gun

Andy Long, of Shamokin, a member of the Game Commission and former Amateur Trapshooting Assoc. president, took first place in the veterans' competition at the Grand American Trapshoot in Vandalia, Ohio, in August. His score was 199/200.

Grouse Newsletter

A new grouse hunting newsletter is in the works, to be produced by Ken Szabo, 17130 Chatfield, Cleveland, Ohio 44111. If you are a grouse hunter, prospective hunter, or just a grouse fancier, Ken would like to hear from you.

GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9x12 inches on 11x14 heavy, coated paper, without the GAME NEWS logo. The set includes Ned's woodcock from the April 1974 issue; the woodchuck from July 1974; the doves from September 1972, and the buck and doe from the December 1971 issue. These prints are not available individually. The price is $3 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.

Waterfowl Seasons Set

WATERFOWL seasons and bag limits for 1975 have been established by the Pennsylvania Game Commission within frameworks set up by the U.S. Fish and Widlife Service.

There will be split seasons this year on both ducks and geese, a brant season will be held for the first time since 1971, bonus scaup may be taken on Lake Erie and Presque Isle Bay throughout the entire duck season, and hunters will be able to harvest both snow and blue geese in Pennsylvania this year for the first time since 1931.

The initial season for ducks, coots, mergansers and Canada geese will open at noon on Wednesday, October 15. The early season on ducks, coots and mergansers will end at sunset on Saturday, November 22, while the early season for Canada geese will end on Saturday, December 6.

The second season for ducks, coots and mergansers will open at noon on Wednesday, December 3, and close at sunset on Saturday, December 13. The second season for Canada geese will open on Thursday, January 1, and close on Saturday, January 17.

The season for snow and blue geese will open at noon on Wednesday, October 15, and close at sunset on Thursday, November 13. This year's brant season will open one-half hour before sunrise on Monday, November 10, and close at sunset on Saturday, December 6.

No hunting will be permitted for any wild birds or wild animals before noon on Wednesday, October 15, except that deer may be taken with bow and arrow, and upland game birds may be taken on regulated shooting grounds.

Hunters interested in applying for goose blinds at the Middle Creek Wildlife Management Area in Lebanon and Lancaster Counties or at the Pymatuning Waterfowl Area in Crawford County should note that the opening day of waterfowl hunting at Middle Creek will be Thursday, October 16, and waterfowl hunting will begin at Pymatuning on Friday, October 17.

The daily bag limit for ducks will



THE SNOW GOOSE gets its name from its white feathers (only the wing tips are black). Sexes look alike; lengths average 26-33 inches and weights 4¼-10½ lbs.



THE BLUE GOOSE has a white head and neck, with brownish body feathers. Both sexes look alike. Lengths average 25-33 inches, with weights running 4¼-6½ lbs.

again be 4, with a possession limit of 8 after the first day. Hunters this year may again take 15 coots daily, with a possession limit of 30. The 1975 bag limit on mergansers remains at 5 daily and 10 in possession.

Three Canada geese may be taken per day, except in Crawford County (including the Pymatuning Waterfowl Area) and at the Middle Creek Wildlife Management area in Lebanon and Lancaster Counties, where the daily limit will be 1. The possession limit on Canada geese will be 6 after the first day of the season.

A gunner may not take more than 2 wood ducks per day, and he may not have more than 2 woodies in his possession at any time after the opening day.

Not more than 2 black ducks may be taken daily this year, and a hunter may not have more than 4 of the species in his possession.

Although the daily limit on mergansers is 5 with a possession limit of 10, not more than 1 hooded merganser may be taken daily, and the possession limit on hooded mergansers is 2.

During the regular duck season, hunters may take 2 scaup daily in addition to the regular duck limit, but only on the waters of Lake Erie and Presque Isle Bay. The possession limit on the extra scaup is 4.

The daily bag limit during the brant season will be 4, and the possession limit on brant will be 8. The daily bag limit on snow and/or blue geese will be 2, with a possession limit of 4. Hunters may again take 7 sea ducks daily, with no more than 14 in possession after the first day of the season.

On the opening day of the regular small game season, Saturday, October 25, it will be unlawful to take any wild birds or any wild animals, migratory or otherwise, before 9 a.m. in Pennsylvania.

Otherwise, regular waterfowl hunting hours will be from one-half hour before sunrise until sunset, except at the Pymatuning Waterfowl and Middle Creek Wildlife Management Areas, where special shooting hours will be in effect.

The table on the following page summarizes the 1975 Pennsylvania waterfowl seasons.

Available Publications

The following publications are available from the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120. Prices quoted include taxes, handling and postage.

GONE FOR THE DAY, by Ned Smith. All of the outstanding columns and artwork which appeared under this title in GAME NEWS during a four-year period. Delightful reading for everyone. 216 pp., $2.50.

THE WHITE-TAILED DEER IN PENNSYLVANIA, by Stanley E. Forbes. Detailed information on all phases of the whitetail's life. 40 pp., 50 cents.

BIRD AND MAMMAL CHARTS, by Ned Smith. Set 1 (20″ x 30″) $2.00. Winter birds, marsh and water birds, waterfowl, birds of prey. Set 2 (20″ x 30″) $2.00. Mammals of farm and woodlot, mammals of the mountains, birds of the forest, birds of field and garden. Set 3 (11″ x 14″) $2.25. All eight charts listed in Set 1 and Set 2. Individual charts not sold in either size.

1975 PENNSYLVANIA OPEN SEASONS FOR WATERFOWL AND OTHER MIGRATORY GAME BIRDS UNDER FEDERAL AND STATE REGULATIONS

SPECIES	Open Seasons First Day	Open Seasons Last Day	Daily Bag Limits	Maximum Possession Limits	SHOOTING HOURS
DOVES	Sept. 1	Nov. 8	12	24	12 o'clock noon to sunset.
†RAILS (Sora and Virginia)	Sept. 1	Nov. 8	25††	25††	One-half hour before sunrise to sunset (except on October 15, when the opening hour will be 12 o'clock noon, and on October 25, when the opening hour will be 9 a.m.).
GALLINULES	Sept. 1	Nov. 8	15	30	
WILSON'S or JACKSNIPE	Oct. 11	Nov. 29	8	16	
WOODCOCK	Oct. 11	Nov. 29	5	10	
DUCKS	Oct. 15	Nov. 22	4*	8*	One-half hour before sunrise to sunset. EXCEPTIONS: 1. Noon until sunset on October 15. 2. 9 a.m. until sunset on October 25. 3. Noon until sunset for ducks, sea ducks, coots, mergansers on December 3. 4. Controlled shooting sections of Pymatuning Waterfowl Area: 9 a.m. until noon on Oct. 25; on other shooting days (Mondays, Wednesdays, Fridays and Saturdays), one-half hour before sunrise to 12 noon. 5. Controlled shooting section of Middle Creek Wildlife Management Area: 9 a.m. until noon on Oct. 25; on other shooting days (Tuesdays, Thursdays and Saturdays), one-half hour before sunrise to 12 noon.
SEA DUCKS (Scoter, Eider and Oldsquaw)	Oct. 15 *and* Dec. 3	Nov. 22 *and* Dec. 13	7**	14**	
COOTS			15	30	
MERGANSERS			5***	10***	
CANADA GEESE	Oct. 15 *and* Jan. 1	Dec. 6 *and* Jan. 17	3****	6	
SNOW and BLUE GEESE	Oct. 15	Nov. 13	2	4	
BRANT	Nov. 10	Dec. 6	4	8	

†No open season on other species of rails.
††Singly or in the aggregate of species.

EXCEPTIONS: * Daily bag limit of 4 ducks may not include more than: 2 black ducks, 2 wood ducks; maximum possession limit may not include more than 4 black ducks, 2 wood ducks.
** Singly or in the aggregate of species and does not count in the daily or possession limits of ducks.
*** Not more than 1 hooded merganser daily; possession limit of 2.
**** Daily limit of 1 goose in Crawford County and at Middle Creek Wildlife Management Area.
Extra Scaup: Restricted to waters of Lake Erie and Presque Isle Bay; daily bag limit of 2 and possession limit of 4 in addition to above duck daily bag and possession limits.

ON THE OPENING DAY OF SMALL GAME SEASON, SATURDAY, OCTOBER 25, 1975, IT IS UNLAWFUL TO HUNT ANY WILD BIRD OR WILD ANIMAL, INCLUDING MIGRATORY GAME, ANYWHERE IN PENNSYLVANIA PRIOR TO 9 A.M. SUNDAY HUNTING PROHIBITED.
(NO OPEN SEASON - CANVASBACK AND REDHEAD DUCKS AND SWANS.)

MIGRATORY BIRD HUNTING METHODS — *Permitted:* Dogs; artificial decoys; longbow and arrow; shotgun not larger than 10 gauge and incapable of holding more than 3 shells; bird calls, except recorded or electrically amplified calls or sounds or recorded or electrically amplified imitations of bird calls or sounds; blinds; floating craft (except sinkbox) including those propelled by motor, sail and wind, or both, when the motor of the craft has been completely shut off and/or the sails furled, as the case may be, its progress therefrom has ceased, and it is drifting, beached, moored, resting at anchor or is being propelled by paddle, oars or pole, or if the craft is used solely as a means of picking up dead or injured birds. *Prohibited:* Trap, snare, net, crossbow, rifle, pistol, swivel gun or machinegun; shotguns capable of holding more than three shells unless gun is plugged to 3-shot capacity so that plug cannot be removed without disassembling gun; sinkbox, motor-driven conveyance, motor vehicle or aircraft; shooting from motorboat or craft under power; live decoys; recorded or electrically amplified bird calls or sounds or imitations thereof; motor-driven land, water or air conveyance or sailboat used for the purpose of or resulting in concentrating, driving, rallying or stirring up migratory birds or waterfowl; salt or bait. No person may possess or transport more than the daily bag limit or aggregate daily bag limit, whichever applies, of migratory game birds, tagged or not tagged, at or between place where taken and either (1) his automobile or principal means of land transportation; or (2) his personal abode or temporary or transient place of lodging; or (3) a commercial preservation facility; or (4) post office or common carrier facility, whichever one he arrives at first.

FEDERAL STAMP FOR MIGRATORY BIRD HUNTING—No person who has attained the age of 16 years shall take any migratory waterfowl (ducks, sea ducks, coots, mergansers, geese) unless at the time of such taking he has on his person an unexpired Federal Migratory Bird Hunting Stamp (duck stamp), validated by his signature written across the face of the stamp in ink. A person who has not reached his 16th birthday does not have to have a stamp. This stamp is not required to hunt doves, rails, gallinules, woodcock, or Wilson's or jacksnipe. Federal Migratory Bird Stamp available at U.S. Post Offices.

NOTE: One fully feathered wing or the head must remain attached to each migratory bird (except doves) while being transported. Migratory game birds left in the custody of a person other than the owner must have a tag attached, signed by the hunter, stating his address, the total number and species of birds and the date such birds were killed.



WOODLAND THOUGHTS

BY LOU HOFFMAN

Wildlife Education Specialist

Seasonally, the asters mark the leeward side of summer, sprinkling a tint of color even into early fall. They are colorful, but the real shades of the season bounce off the tree canopies in hues of gold, yellow and red in combinations that vary with the landscape. Blending into the foliage, autumn's wildlife are going through transitions, too. Waterfowl and their smaller songster cousins are moving southward; rodents are caching food stuffs; bears bulge with fat; bucks have polished antlers and swollen necks; foxes glisten with coats readied for winter's cold. Little wonder that fall is favored by the outdoorsman. Fresh air replaces summer's stagnation, and it's good to be outside. But there is a lesser, more regular change that is part of all seasons. It is filled with the excitement and beauty of fall, yet few pay much attention to it. And some, reflecting childhood fantasies, may fear it. It occurs daily, and we call it the night. *This month I'd like to share a particular one with you—one that I'll remember for a long while.*

WHILE IN THE northcentral part of the state last fall, I stopped at a remote, one-room cabin to spend the night. I figured the few miles' deviation in travel it cost to reach the cabin would be compensated for by a change from the "motel monotony." Since the following day was Saturday, there was no schedule to keep. I felt it would be a great way to end a busy week.

After parking the car, I gathered a few essentials and, checking my watch, noticed there was about a half-hour of daylight left. My destination was 45 minutes away. When I waded into the woods, it seemed like I was swallowed by the mature stand of black cherry, red maple and the lesser species of this forest type. The trees seemed almost maternal in nature. Leftover robins and a few thrushes provided day-ending sounds. I was walking quickly, and silently I scolded myself for letting the usually hurried pace of the job spill over into this leisure time.

Jumping a few deer reminded me of those I sighted before parking the car. They included four bucks, one sporting a nice rack. My pace wasn't the only thing that was conditioned, as my thoughts drifted to the hunts that I've enjoyed here. White flags disappearing into the darkness reminded me to keep moving.

The last part of the walk was down a steep east-facing slope, which lessened the now waning light. At the cabin, the dark forms of four more deer would have gone unnoticed were it not for their noisy hooves on the adjacent, rocky slope.

The provisions I carried tasted good, and after drinking from a nearby stream, I felt contented. Taking care of a few chores and then settling

into a chair, I could feel the fire chasing the dampness from this little-used place.

From the small porch I watched as the dark was slowly betrayed by a nearly full moon emerging from behind the ridge. Its rays cast a kind of pureness, and the place became almost mystical.

Crickets, cicadas and a host of other invertebrates provided a tireless, almost monotonous chorus. Dozens, hundreds, probably thousands of participants produced a symphony second to none. The sounds of the night added much to the blackened landscape. Shattering these familiar sounds and standing out by itself, the dog-like "hoohoo-hoohoo . . . hoohoo-aw" of the great horned owl echoed farther down the hollow. He is boss of this nighttime world and his cries assert the power of his position. I suppose I am humanizing, but I can't help but think that lesser prey animals would fear that sound.

Memory Lingers

Nostalgia was here, too. The builder of this cabin was gone now, but the memory of him was not. I respect and inwardly thank him for his efforts. But even before he was here, the Indians walked this way, and maybe camped near this spot. And the wildlife of all kinds that undoubtedly passed within sight of the cabin would probably, if paraded simultaneously, capture my attention for hours—maybe even days. All these things added significance to the night, and I'm glad they happened.

This kind of solitude creates respect, and my normally superior human traits were dulled. More rational and objective thinking chased the vague mental apprehensions from my mind. But nonetheless they do exist, and some sounds seem to alert my senses more than others, I knew I was perfectly safe, but my guard was not always relaxed that night. Silly as that may be, I think it adds to my respect for this quiet place.



THE great horned owl is boss of the nighttime world and his cries assert the power of his position. I can't help but think that prey animals fear his call.

Later that night two porcupines trying to chew through the front door jarred me from my sleep. When I opened the door, I suppose we were equally surprised by each other's presence. Everyone should have moments like these.

The next morning I left that place with a much-improved attitude for the coming week. A simple yet rustic experience is a good thing, and the walk out didn't seem to take any effort.

Thinking back, there was nothing extraordinary about that night. Maybe the place would not be accessible to most, but the ingredient that made it so interesing was the night itself, and that occurs everywhere.

Few explore that part of the natural world. Retreating to our dwellings at dusk, we miss an interesting time. We shouldn't! Next time out, detain yourself long enough to enjoy that dark part of the day. You will be rewarded by some new and unusual sights and sounds.

How to Score on Squirrels

By Susan M. Pajak



SUCCESSFUL squirrel hunting requires patience, plus the ability to sit without moving a finger for long periods of time, regardless of itches, insects or adverse weather.

TO HUNT squirrels successfully one must go where the nuts are.

Squirrels subsist on nut meats (acorn, hickory, butternut) as well as some seeds and a sprinkling of other woodsy foods, so the above two-edged statement, terse as it may be, is really the plain truth of squirrel hunting. Find first the mast, or food, trees and you'll most likely find the squirrels.

Squirrel hunting can be likened to deer hunting in the respect that a harsh movement will undoubtedly send a squirrel out of sight faster than yesterday's pay check. Human scent doesn't bother a busy bushy-tail half as much as a heavy footstep will.

It is comical when leaning on a tree, perfectly still so that it looks like you're sleeping with your eyes open, to have a squirrel skitter down beside you. Yet, if you so much as move a finger, it'll disappear into thin air.

And they do move fast. A quick, jerky little run—pause—and then off again. It is written that the gray squirrel can perambulate at 12 miles per hour or better. (In my opinion, it's better, especially down the tree!)

Mindful of this, a squirrel hunter should develop a quick, keen eye and learn to sit perfectly still despite being chewed up by an occasional bug or two not yet caught in an October frost.

Should you prefer to lounge lazily under a tree and watch the clouds go by, it is doubtful you'll knock a squirrel the whole day long. Too many stories have been written regaling the lazy, hazy afternoon squirrel hunt, with the author commenting at the end about the day's unfortunate scarcity of squirrels. Little wonder.

Keep your eyes open and your ears in tune with the woods. Search

GIRLS, GUNS, & GAME...

those trees up and down and listen for a rustling in the leaves on the ground.

Concentrate on seeing squirrel and keep your gun in your hands so you can get it to your shoulder quickly. You simply can't get off a shot if the gun isn't in your hands.

Squirrel hunting demands just as much intenseness as hunting any other game. You have to concentrate to the point where you're aware of every sound or movement that might be a squirrel. Even before you enter the woods you should have squirrel on the brain, so to speak, and you should remind yourself that "By golly, I'm going to knock some squirrels today!" Always think positively.

Go into the woods about fifty yards or so and sit down where the view is good and not overly obstructed by a lot of underbrush. Keep still. Scan the trees up and down and over and over again until you are convinced there can not be too many around this spot. If so, move in another fifty yards, etc.

Oftentimes a gray will come down so far, or go up so far on a tree, and then zip around to the other side. Usually they'll pause just a split second before taking off again and that's all the time you need. And sometimes there is more than one longtail up that tree. Wait a few minutes before you move to pick up the first one. You may connect on a second one.

If you're good with a rifle, or just like using that kind of firearm, a scope-sighted 22 is the ticket for bushytails. It takes someone in the expert class to score consistently with the rifle, though. There's nothing wrong with using a shotgun for squirrels, and most of us will find the smoothbore easier to connect with. As to other equipment, regular hunting duds will do . . . but please wear some fluorescent orange, okay?

From having spent a decent amount of time observing squirrels, I've noticed that nothing sends them up a tree, or out of sight, faster than obvious movements and strange sounds. Color and human scent apparently do not alarm them, especially when they are gathering and/or "planting" nuts.

* * *

Thought you might like to know that I received close to 300 requests for my sauce recipe mentioned in an earlier column. The letter with the most interesting postmark came from Sugar Notch, Pa. Isn't that name delightful? A handful of letters came from out-of-state—California, Connecticut, Maryland, Ohio, West Virginia, New Jersey, Indiana and Massachusetts. You readers are absolutely the greatest!!!

Game Commission Thanks Contributors

The Game Commission wishes to thank those individuals and organizations who have generously donated money to the Game Fund. These concerned citizens have certainly done their part for conservation in Pennsylsylvania. The Commission is permitted to accept donations from any person, association, corporation or firm. Contributions go toward purchasing public hunting lands, which can be used by hunter and non-hunter alike, and for other wildlife management uses.

Rountree's in the Kitchen Again! And Here Are . . .

Some More Game Recipes

By Les Rountree



A HAUNCH OF VENISON, wrapped in foil with appropriate herbs and roasted in a hole in the ground, makes a meal too good for anyone who isn't a hunter!

HUNTING IS certainly a popular sport in Pennsylvania, but the good times don't end when the hunt is over. The bounty of our outdoors is fine eating when properly prepared. It is possible to use recipes that have been developed for other meat when turning game into table fare, but the following formulas have been tested by me and other chefs with the real thing.

The hunter's responsibility is to acquire the game and clean it. He may cook it too if he's so inclined, but for heaven's sake, don't present the chef with a shot-up, mangled mess of meat and expect it to taste any way but bad. Deer should be hair and blood free, and game birds should be skinned or plucked until they are reasonably featherless. I like to remove the innards as quickly as possible from any game and cool it out rapidly. Don't carry pheasants and grouse around all day long in the bloodproof pocket of your hunting coat. The Europeans may like "ripe" game but the majority of Americans, including me, don't. Most of us work too hard and too long to gather what little game we bring home, so don't waste it. It's much too valuable.

I've listed a number of venison recipes in this column at other times, so I won't go overboard on deer this month except for these two simple methods of broiling and braising. The venison will be even better if the carcass is allowed to age ten days to two weeks before being cut up. The ideal temperature is just above freezing (34 to 36 degrees F.). If it's been hung in a cool place and the temperature does go up to 42, it'll still be okay. But repeated freezing and thawing is not good for venison, not matter what the old-timers say.

Broiled Venison Steak or Chops

Have your steak or chops cut 1 inch thick. One-half hour before broiling, moisten the meat, sprinkle with meat tenderizer and pierce in several places with a fork. Butter both sides of meat and place on a broiler rack, 4 inches away from the heat. Broil 5 minutes on each side, serve immediately. salt and pepper to taste at table. If you like the taste, you might want to add a shake of garlic powder with the tenderizer. Broil quickly; overcooking tends to make the meat rubbery.

Venison Shoulder Roast

Venison roast
Flour seasoned with salt and pepper
Butter or margarine
¼ tsp. basil
¼ tsp. parsley
1 chopped carrot
1 chopped onion
1 diced celery stalk
1 cup beef bouillon
1 cup dry red wine

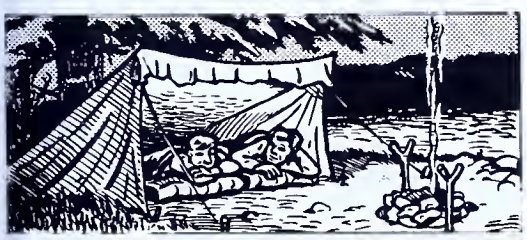
Dust the roast with flour mixture and brown in a heavy Dutch oven using the shortening. When brown on all sides, pour the rest of the ingredients over the roast, cover and simmer for 1½ hours, turning the roast several times. Add enough cut-up carrots and potatoes to serve your family or guests and simmer another 30 minutes.

Here are three new ideas for pheasants. Two of them use whole birds and the roast pheasant recipe requires that the bird be plucked. Unless a special recipe requires it, I usually skin my birds . . . it's quicker. Badly shot-up birds are much easier to skin and can be utilized nicely in concoctions calling for cut-up birds. Don't knock the sauerkraut idea until you try it. The juice penetrates the meat and makes even the breast meat moist and tender. The same recipe, incidentally, works very well for ruffed grouse . . . if you're lucky enough to get many of them.

Roast Pheasant

2 pheasants
Sausage stuffing (see below)
Butter
½ cup dry sherry
2 tbsp. currant jelly

Wash and dry pheasants (with skin on). Stuff, tie legs and wings to body, coat with butter and place on a buttered rack in a shallow oven-proof pan. Roast in 350-degree oven, basting every 30 minutes with butter. Roast for 1½ hours, then mix sherry and jelly and pour over birds. Baste with pan drippings every 10 minutes for another 30 minutes or until birds are tender. Salt and add a dollop of pan drippings to each slice of meat as it is removed from the bird.



Sausage Stuffing

½ lb. sausage meat
¼ cup parsley
2 tart apples, peeled and chopped fine
1 beaten egg
Mix well and stuff two birds.

Pheasant with Sauerkraut

Rub bird with butter and brown under broiler. Put in foil envelope with a can of sauerkraut and a quartered and cored apple. Seal foil and bake in a 325-degree oven for 1½ hours.

Braised Pheasant

1 or 2 pheasants, cut in pieces
Flour
Margarine and cooking oil
1 cup chicken bouillon
1 package dried onion soup mix
1 4-oz. can mushrooms
½ tsp. tarragon

Roll pheasant pieces in flour and brown on all sides in melted margarine and oil (equal amounts of both) in a heavy skillet. Add rest of ingredients and simmer for 1 hour or until tender. Salt and pepper the pieces as you serve them.

A lot of hunters don't bring woodchucks home. I'll admit that some of the big sod-busters are tough enough to require month-long cooking, but the young ones of the year are very tasty when prepared as follows. As a rule of thumb, any chuck under about eight pounds is probably a young one.

Woodchuck in Tomato Sauce

A young woodchuck, cut into serving pieces. Enough water to cover pieces with ½ cup vinegar added.
¼ cup cooking oil
1 chopped garlic
Salt and pepper
2 cups of tomato sauce
¼ tsp. basil

Soak woodchuck pieces in vinegar overnight. Remove from water, dry and brown with garlic in oil. Salt and pepper, add tomato sauce and basil, cover and simmer for 2 hours or until the meat is tender.

It's a funny thing, but Pennsylvania is about the northern cut-off point for considering squirrels suitable eating game. The New Englanders don't eat 'em at all and, surprisingly, not many bushytails are eaten in New York State either. Personally, I think that squirrels are just about as tasty as any game in the woods. The old "dog"





ITALIAN-STYLE potato casserole, left, goes surprisingly well with many kinds of game. Above, fried squirrel. Nothing better comes out of the woods.

squirrels of two years or more can be a trifle chewy, but both of these recipes will tenderize all but the toughest ones.

Fried Squirrel

Simmer squirrel pieces in salted water with peppercorns and 2 bay leaves for 1 hour or until tender. Thoroughly dry the meat on paper toweling, coat with flour and brown on all sides in butter in a heavy skillet. Serve on heated platter.

Fricasseed Squirrel

1 squirrel, cut into pieces
¼ cup flour
3 slices of bacon, cut in small pieces
½ tsp. thyme
Salt and pepper
1 small sliced onion
2 tsp. lemon juice
½ cup meat bouillon

Rub the squirrel pieces with salt and pepper and roll in flour. Fry in heavy skillet with bacon pieces until brown on all sides. Add rest of ingredients, cover and simmer for about 1 hour. Serve with buttered noodles, using the broth as a sauce.

Special note: squirrels in particular should be cleaned as soon as they are killed. It's not necessary to skin them at that time, but the innards should be removed. If the job of gutting is prolonged, it is much more difficult. Besides, they'll taste better.

Down in Maryland at Remington Farms, where they ought to know how to cook ducks, they have devised an excellent recipe for wild mallards. Some hunters like their ducks a bit on the rare side, but for those who don't, this is a good one. I think the curry and the sherry make the difference.

Remington Mallards

Place ducks in pan, breast up. Sprinkle each duck with 1 tbsp. of dry sherry. Season each with:

½ tsp. celery salt
½ tsp. celery seed
1 tsp. salt
½ tsp. onion salt
¼ tsp. curry powder
¼ tsp. pepper

Let the ducks stand in pan about 1 hour. Chop 1 small onion and 1 stalk celery and add to pan. Add ¼ to ½ inch of water and bake at 500 degrees for 20 minutes. Turn the ducks breast down and bake another 20 minutes. Cover pan, turn heat to 300 degrees and bake another hour. If stuffing is desired, use any poultry stuffing recipe.

Here's an easy one for pieces of rabbit, especially for those who like the tangy-tomatoey taste of barbecue sauce—and most people do. I'll bet this one will work well with pheasant or squirrel also.

Barbecued Rabbit

Rabbit, cut into serving pieces
½ cup flour
1 tsp. salt
¼ cup margarine

Barbecue Sauce

3 tbsp. meat bouillon
3 tbsp. chili sauce
1 tsp. steak sauce
3 tbsp. catsup
2 tbsp.vinegar
1½ tsp. salt
¼ tsp. pepper
½ small onion, minced
1 tbsp. brown sugar

Dry rabbit pieces on paper toweling. Dust with seasoned flour and brown in fat. Combine sauce ingredients, pour over rabbit and simmer until done; about 1 hour.





PHEASANT with sauerkraut is a delightful surprise, right, while braised pheasant, above, offers yet another great way of preparing this popular gamebird.

We don't bag many quail in Pennsylvania but I wish we did. For outstanding flavor the bobwhite quail is one of the finest birds in the world. Strong condiments are not necessary for quail nor are they even desirable. The addition of some dry white wine to this formula is the finishing touch. Incidentally, this is the only game bird that I enjoy with a bottle of white or rosé wine. Most other game dishes are much better served with a rich burgandy or red Italian. This recipe is from the NRA "Wild Game Cookery."

Quail Casserole

Quail
Salt and flour
¼ cup margarine
½ pound fresh mushrooms or 1 (4 oz.) can
Chopped fresh parsley (or parsley flakes)
Dry white wine (about 2 cups)

Split birds down the back, salt and dust with flour. Sauté in skillet until brown on both sides. Place birds in a casserole. Pour pan drippings over birds, add mushrooms and parsley and pour enough wine into casserole to half cover the birds. Cover casserole and bake in 350-degree oven for 1 hour. Doves and pheasant quarters may also be cooked this way. Allow 45 minutes for doves and 1¼ hours for pheasants.

Potatoes aren't wild game but here's a spud recipe that was passed on to me by Terry Bell, the long-suffering wife of the editor of this magazine. It goes perfectly with many game recipes and since Pennsylvanians are known for their habit of eating potatoes three times a day, I thought you'd like to see it. It's easy and it's terrific. Bob Bell will shudder at the mention of "fish" in GAME NEWS, but this potato dish goes ideally with broiled trout.

Italian Style Potato Casserole

This is a family recipe with very little indication as to the exact proportions, but if you try it, as I did, you'll find it goes together quickly and tastes delicious. The one guideline Terry gave me was to use one medium potato per person.

Oil or butter a casserole dish, place a layer of chopped tomatoes (fresh or canned) in the dish, then add a layer of thinly sliced potatoes, salt and pepper. Again, add a layer of tomatoes. This time sprinkle them with oregano and a generous amount of Parmesan cheese (grated). Repeat the potato, salt, pepper, tomato, oregano, cheese layers; ending with the tomato layer. Dab the top with a couple tbsp. of butter or some cooking oil, cover and bake at 375 degrees for 1½ hours.

I receive some dandy recipes from readers each year and I'll send out the request for more. If you've got one and you'd like to share it, please send it to me in care of GAME NEWS. I try all that sound good (and fairly easy) and one of these days I'm going to put them together in some sort of book form. Good eating!

Smart Bow Hunters Dress for . . .

CAMOUFLAGE & COMFORT

By Keith C. Schuyler

Photos from the Author



CAMOUFLAGE clothing featuring red or orange blotches lets other hunters see you but does not frighten game.

SOME YEARS BACK I sat on one wooden bench with my feet propped on another, pushing a pencil through my first attempt at a book. My feet were elevated to keep them off the cold plank floor, and I was wearing all the clothes I had, including an overcoat and knitted gloves.

It was mid-winter and a number of us were guests of the Luftwaffe in Germany after zigging our B-24 bombers when we should have zagged. I clearly recall vowing that, if I ever got back on the other side of that barbed wire, I would never be cold or hungry again if it was within my power to avoid it.

I forgot about hunting!

Oh, well, the book was fiction, too. But I really did stick to the non-hungry bit. For the most part. Our bathroom scales argue the subject with me each Monday morning and send me back to the leafy vegetable routine, but they prove that hunger is not one of my faults. So much for that.

On the cold business, my score hasn't been too bad either. A certain amount of information on how to keep "non-cold" came from the written word, but experience before and after the Air Force interim taught me much. For example, many years ago I advised hunters who wanted to wear scarves that they would do best to wrap it around their kidney area rather than their necks. Being somewhat unscientific, I didn't know why, but I knew that if a person could keep the small of his back warm, he would be warm all over with the possible exception of the extremities, the toes and fingers. You will note that many jackets today have flaps that cover the kidney area.

Also, it seemed only natural that, if a garment such as a wool sweater was covered with a wind-resistant outer cover, body heat would be trapped where it could do the most good. Today, there are lightweight jackets and trousers made of synthetic fibers which do a remarkable job of trapping and holding body heat. Bulky air space is provided through insulation beneath nearly wind-proof covering.

Important to the bow hunter is the

fact that some of the suits are made in camouflage. There are the one-piece coverall types as well as separate jackets and trousers. For cold weather hunting, nothing beats the modern fabrics. Of course, it's necessary to smooth out the bulk on the bow arm to prevent the string from catching, and nylon can be noisy when you're moving. But the advantages far outweigh these drawbacks in really cold weather.

The biggest problem for the bow hunter is in anticipating the weather. October can be really hot, but December and January can be rough in the opposite extreme. And any one day can vary considerably from the norm in temperature.

The type of hunting planned will dictate to a considerable degree what clothing is in order. If drives are to be held, the same clothes which keep you warm on an early morning stand can make life miserable later in the day when you are on the move.

One important thing to remember. You can always shed outer garments if they make you too warm, but you can't put on clothing that you don't take along. Since practically all hunts involve the use of automobiles to get you to and from the intended area, it is no real inconvenience to carry extra clothes to fit the temperature.

What is cold to one person may be only chilly to another. One of my sporting goods suppliers, an occasional hunting companion, sold me a sleeping bag that is rated about 15 degrees warmer than he recommends to others and for himself. "I know *you'll* be comfortable," he promised, "but I'd freeze in it."

It is true that the ability to withstand extremes of heat and cold varies among individuals, and each should acquire clothing that will be comfortable. Over-dressing, however, can lead to as much discomfort as the opposite extreme. A brisk walk or a climb to a stand can cause perspiration which quickly turns to ice water when the hunter stops moving. Personally, I would much prefer to be a little on the cool side rather than risk overheating with its resultant problems. Of course, shivering cold is a detriment to comfort as well as a handicap if a shot presents itself.

No Reason to Suffer

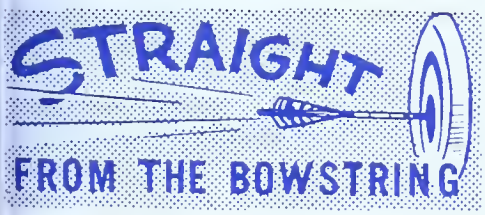
If the hunter just getting started finds that there aren't enough funds left for the more sophisticated outerwear, there is no reason to suffer. Just keep in mind the principle on which such garments are constructed. Wear something to provide air space next to the body with a windbreaker over it. You need only think how easy it is to work up a sweat with a rubber raincoat on to appreciate the advantage of trapping body heat where it will do the most good.

Insulated underwear is great if you know that it will be cold throughout your hunting day. But it is much more difficult to shed undergarments if the weatherman trips you up.

If you plan an excursion which takes you back into the more remote areas, even for just a day, it's a good idea to carry a receptacle for clothes that you may wish to take off temporarily. A small pack that fits over the shoulders or on the belt works fine, and it will be available as the temperature drops in late afternoon.

Camouflage is an important part of all this. As long as the outer garment breaks up your image, it doesn't matter what you are wearing underneath. Consequently, a light camouflage jacket can be permanently worn outside regardless of what extra clothing you might need or what you might wish to remove.

It takes a bit of planning, but personal comfort is important to any hunt and worth the effort to provide it. If it is just a jaunt to a nearby





WHEN WEATHER IS UNCERTAIN, it's important to have extra clothing to adapt to the weather

location in shirtsleeve weather, there are no real problems. Over the long haul, however, it is well to have proper clothing to fit any situation if you are serious about this business of bow hunting.

When it comes to headgear, weather can again have a part in what you wish to wear. Again, camouflage is best. The type of hat is sometimes dictated to a degree by where the individual anchors on the face to shoot the bow. Those who use a high anchor may find that a broad-brimmed hat interferes with the bow string. This is determined somewhat by the length of the bow itself. A short conventional bow, or a compound bow, provides more string clearance than a longer bow.

Those who are turning gray—but who share my dislike of any kind of hat—may be forced to wear some sort of headgear for practical considerations. It doesn't make much sense to be well-camouflaged up to the neck and then to top it off like icing on a cake. Also, hair color enters the picture. Blondes have the same problems as those who find their hair turning hoary. There just isn't much natural foliage on the hunting scene to match yellow, silver or white.

Even your complexion should be considered in total attire. Those who are naturally dark or carry a healthy tan into hunting season have a certain camouflage effect. Those who sunburn easily are more apt to need a face mask or facial camouflage. Anyone is better camouflaged with either the mask or facial camouflage, which is easily washed off after the hunt. As a substitute for commercial cosmetics, use burnt cork to streak your face and effect camouflage of a sort.

Masks, such as those made by Penn Woods, can cover the face and any hair not hidden by a hat. Masks come with a built-in pair of glass-less spectacle frames, so you can wear your regular eyeglasses under them. They are made of light netting so they aren't uncomfortably warm.

Club patches are great, and they advertise the fact that the wearer contributes to organized archery, something that this column has consistently



EXTRA CLOTHING IS EASY TO come by when your camp and vehicle are readily available.

encouraged. However, unless they blend in with the general camouflage effect—and most of them don't—they have no place on a hunting jacket. It's like the bow hunter who follows all the rules of camouflage right down to his bow: because he doesn't like to cover the beautiful finish, he carries around a stick that is a dead give-away in deer circles. This column is about clothing, but it's almost useless to concentrate on attire that will help the bow hunter get close to a deer if he is going to carry a bow that visually announces his presence every time he turns it a few degrees.

The same goes for arrows. What good is a complete clothing camouflage effect if the archer carries a quiver full of white feathers or vanes? True, he will lose more arrows, and he will have more difficulty following his arrow if he camouflages shaft as well as fletching, but bright arrows are eyecatchers for the quarry, too.

You can extend this to the quiver. If it doesn't fit in with the general camouflage effect, it can announce your presence no matter how carefully or quietly you hunt. (This, of course, depends to some extent upon whether it is a back or a bow quiver.)

At that most important moment, when you draw down on an animal, the tackle you carry should certainly fit in with the painstaking effort you have made to become invisible to your quarry.

Hands Must Move

The hands don't seem overly important. But remember that the hands are the one part of the body which must move when the shot is made. The fact that some bow hunters are able to make shots at distances of only a few feet testifies to the fact that camouflage is extremely important.

There are gloves available which are completely camouflaged. In cold weather, something more comfortable must be substituted. Except for the very dark complexioned, anything is better than the bare hands. Most leather gloves have a natural camouflage which is acceptable.

It is well to note that you can buy

camouflage clothing which contains colors that make you visible to other hunters without alarming your quarry. Deer, small game and varmints see in shades of gray, so they aren't overly alarmed by fluorescent colors blended into a camouflage pattern. Safety is extremely important, so think about one of these outfits.

Probably the most important part of a bow hunter's attire is footwear. There is only one way to really get back to nature, and that is by shank's pony—your own two legs. All else is irrelevant if you can't make it to your destination. And even if you make it, how well you perform depends on whether your feet are comfortable.

The worst thing any hunter can do, from the standpoint of personal comfort, is to start out a hunt with new footwear. Whether you wear a pair of tennis shoes, or the best boots money can buy, it is important that you have first walked a considerable distance in them. By breaking them in properly, you guarantee that they will not break you on that important hunt.

There are those who will trust their feet to rubber boots, particularly if it is wet or cold. More power to them. But if you're planninig any serious walking, think long and hard before trusting your feet to rubber boots. They are notorious for causing feet to perspire and will be cold when activity stops and the perspiration turns to frigid moisture. In addition, perspiration is an invitation to blisters when socks or stockings become wet.

There are combination boots with leather tops and rubber bottoms whieh are favored by Canadian guides who must endure wet feet and cold on frequent occasions. Certainly these are superior to all-rubber boots. When it comes to long-distance walking under all conditions, however, my preference is for leather every time.

A number of companies such as Browning and Dunham make leather shoes which are good for a year of leakproof service. Although they will give many more months of good wear, I've never had a pair that would last more than about 150 miles or 12 months of normal hunting wear without leaking. To maintain this durability, it is necessary to frequently treat them with a silicone water repellent such as Shoe Saver.

One of the big advantages of leather, as opposed to any other material, is that you can walk the water out of it. Even though boots may become wet through complete immersion or leaking, body heat is sufficient to dry them out as water is further eliminated through flexing of the material.

Summer Socks

I wear nothing but summer socks or stockings in leather shoes. They provide sufficient air space within the shoe to withstand reasonable extremes of cold or heat, and they don't make your feet sweat too much. In any event, whether you prefer light foot covering or heavy socks under the shoes, your feet will remain reasonably comfortable *if* the shoes are first properly broken in.

Tennis shoes or sneakers are sometimes desirable if the terrain is such that they can take the gaff. However, unless you are accustomed to such footwear and have strong ankles, there are hazards of straining muscles or your achilles tendon as well as the possibility of turning or breaking an ankle on rough terrain.

Whatever you wear, make sure it has good tread to prevent slipping. Firm arch support and ankle support are essentials. Slippery stones, leaf-covered limbs, mossy areas and potholes are normal hazards of natural woodland floor covering. Be prepared.

There you have it. What has been presented here is based on personal experience. It is intended as a guide, not a panacea.

But remember, there are two essentials that should be considered in dressing for a successful deer hunt with the bow and arrow—camouflage and comfort. Pay attention in these two areas, and you will increase your chance of scoring.

If there's a time for everything, now's the time to . . .

Settle The Hunting Gun Problem

By Don Lewis

Photos by Helen Lewis

"I'VE BEEN using a pretty shoddy looking 7.62 Russian rifle for 20 years, and with darn good results, but my hunting pals insist I should get something more powerful. Honest, my old rifle is the laughing stock of our camp. If I don't buy a modern powerhouse, I'll be tormented forever."

"I don't see where you need a change if the old rifle does what you claim, and it could be that your friends are a little envious. I certainly wouldn't get rid of the 7.62 just to stop the harassment," I told my phone caller.

"Well, maybe I am using the joke bit as an excuse. I really do want to get a more powerful outfit like a 308 or maybe a Magnum."

"Now I think we're getting to the real reason. To outdo your old 7.62, you'll have to go bigger than the 308. In fact, with the 150-grain bullet, the 7.62 compares favorably with the 30-06. Unfortunately, heavier bullets in the 7.62 don't always do too well in the accuracy column."

"I always thought the 7.62 was in the 30-30 or 32 Special class," the caller said. "Are you telling me that old cartridge produces velocities similar to the 308 or the 30-06? I can't believe that, and it's the velocity factor my buddies keep harping about. They want me to go with the faster modern stuff."

"I think your camp buddies may be a little off in their thinking. My association with the Russian outfit has been limited, and I have no records showing I chronographed it, but ballistic tables show the 150-grain bullet has a muzzle velocity of over 2800 fps, and several handloading manuals show similar velocities. Even the 180-grain can be pushed over 2600 fps, and that should prove the 7.62 is not too far off the '06 when it comes to speed."



CLOSE-FLUSHING quail require an open-bored, short-barreled shotgun for best results. Quick handling qualities are necessary for such shooting.

"Perhaps I should get a Magnum for more power," the caller cut in. "I may as well go the full limit, and then I'll be sure. What do you think of the 338 Winchester for a straight deer rifle?"

"I don't want to throw cold water on the idea of buying a new deer



HIGH-COMB stock makes it comfortable for Lewis to use Weaver V8 scope on his heavy-barrel 25-06 Sako chuck rifle. This leads to clean kills.

rifle, but I don't think you need more power. If a new rifle is a must, I'd get something below the big Magnum class. The 338's a fine large game cartridge, but it was never designed for deer. Grizzly bear, moose and elk are big and heavy boned, and the 338 is right at home with them. To use one strictly for deer would be unwise, let alone unnecessary."

"I may as well tell you now that your advice doesn't agree with my hunting pals', Don, and it sounds to me like you're out of tune with the times. Today all they talk about is power and speed."

Our conversation ended on his emphatic evaluation of my shooting knowledge, and he was far from impressed with my advice. Determined to go the "full limit," he rejected ballistic facts and what I thought was sound advice. A victim of the "power and speed syndrome," he was about to take a step in the wrong direction —one that could have dire effects on his future big game hunting.

This conversation took place some years ago, but it's not an isolated case. Since that time, I have had many similar conversations. I realize it's only human to want something new or different, but any change should be for the better. Just the desire for a new hunting gun is reason enough in my book to retire a shotgun or rifle, but the replacement should offer as much or more. It's unfortunate how mortal man gets caught up in fads and passing fancies. The big Magnums such as the 338 Winchester are terrific outfits and will stop any North American big game animal, but they have no place in the deer woods.

I'm not extolling the virtues of the old 7.62 cartridge, nor am I downgrading the 338 Winchester or any other big Magnum. I'm too well acquainted with rifles and cartridges to think along those lines. I am, however, reiterating the fact that going for broke in the power and speed categories is not enough reason to change hunting rifles. The broken-rack 5-point buck I dropped at 95 yards proved to me that the old 30-30 cartridge is far from antiquated or obsolete.

I don't have a pet big game cartridge simply because I know there is a wide variety of cartridges that will humanely stop a whitetail deer or black bear. I do stick with bullets that weigh 125 grains or more, and this leaves out the 6mms. I'd use the 105-grain 6mm bullet if nothing larger was available, but I prefer more bullet weight. The lighter bullets are plenty fast, but it takes more than just speed to make clean, quick kills in the deer woods. I don't agree with those who feel speedsters such as the 220 Swift, 222 and 22-250 are ideal deer cartridges. A 70-grain 224 bullet is now available, but this is still too light a bullet for all types of big game shooting. Speed produces a lot of shock, but deep penetration is also necessary, and the lightweight varmint bullets fail miserably in that.



The hunter desiring a new outfit should use some common sense guidelines instead of going with the crowd. Deer today are no tougher than those back in the gas light era. While hunting methods and shooting distances have changed, a lot of the pre-war cartridges fit in today's big game picture. My first deer hunt put me in laurel so thick I could have shaken hands with a passing buck. That's the kind of situation the 35 Remington, 32 Special and 30-30 Winchester were able to handle with ease. Around 1936, Winchester brought out the ultimate for close range brush busting in their Model 71 348.

World War II had a deteriorating effect on hunting. For practically five years hunting was pushed into the background, with American hunters and shooters having more important things to do. Hunting guns also took a back seat, but when the war was over and the GIs returned, the demand for hunting guns put manufacturers on a different type of firearm production. New models such as the Remington 721 and Savage's 110 were offered as replacements for pre-war outfits.

Significant Change

I'm pointing this out because the post war period introduced a significant change in the method of hunting. Slipping from view were the organized camp drives that posted hunters on watch while drivers pushed through heavy brush and timber, moving the deer ahead. As more individuals acquired camps, the single hunter with a scoped rifle began to dominate the scene. Also, as cover in deer territory matured, 250-yard shots became possible, and the Magnum cartridge became part of Pennsylvania's big game hunting.

This doesn't mean that open shooting requires a Magnum rifle. Some of the old timers like the 30-06 and 270 Winchester will hold up quite well even at 300 yards. The presence of the Magnum cartridge has confused the thinking of some big game hunters. While it may seem logical to carry all the power possible, that in itself is not always the answer. A friend of mine who hunts the laurel thickets along the Allegheny River uses a Marlin 336 30-30 to handle the 75- to 125-yard shots. Anything more powerful would not be needed.



HOWARD MORTIMER and wife Pat like single-shots for chucks. Hers is a Browning with Weaver 3-9x, his a Ruger in 243 cal. with Redfield 4-12x.

To many hunters, a Magnum cartridge means a flat trajectory over a long range. That's true to some extent, but a 150-grain slug can be tossed from the old 300 Savage at close to 2700 fps and is just 10 inches low at 300 yards when sighted in two inches high at 100 yards. The same weight slug coming from a 300 Winchester Magnum leaves the muzzle at 3400 fps and is seven inches low at 300 yards with the same sight set up at 100 yards. In other words, the extra 700 fps muzzle velocity did not flatten the trajectory of the 300 Winchester to any great extent, and the only advantage the Magnum would have would be in its remaining energy.

In the shotgun realm, a similar situation exists. The desire for power and tight chokes has been around a lot longer than the Magnum cartridge syndrome. A belief still remains from bygone days that a long barrel and

full choke make the perfect combination. This is not true. Contrary to popular thinking, a super-tight choke does not produce super-tight patterns. It's very likely that "inner tube" type patterns will result from an overchoked barrel.

In the first place, choke is a means of governing the density of the pattern. To a degree, the more constriction in the muzzle, the tighter the pattern. It should be obvious that a hunter should take into consideration what he wants or needs. I don't need a full choke barrel for the shooting I do at rabbits and grouse in thick stands of pines and vine-cluttered woods. When my longest shot would be less than the distance from home plate to first base, I need a quick-opening pattern. I would only complicate matters by tightening the choke.

On the hunting shotgun, the length of the barrel is not that important. Small game hunting is a good bit reflex shooting, and I don't want to be burdened with a long 30″ barrel when trying to get off a shot at a grouse or speeding rabbit. There's no pattern advantage or added distance to a shot charge coming out of a barrel longer than 26″. We've been brainwashed with the idea that all shotgun barrels should be 28″ or longer. The ultimate in a small game hunting shotgun would be two 26″ barrels bored open and full, but I'm sure my idea isn't popular and probably the gun wouldn't sell.

I've always believed it's the pattern that brings down the game and not so much the power or size of shot. Long range waterfowl shooting and open country ringneck shooting require heavier shot, but rabbit, quail and grouse hunters will do better by sticking with 6s and 7½s. Here is where the shotgun handloader can come up with a load that gives the maximum in patterning benefits. Going for speed in shotgun loading is not necessary; stick with loads around 1150 fps and concentrate more on shot size and weight. Keep in mind that adding an extra ⅛-oz. of shot will not guarantee a tighter pattern.

The type of shotgun is a matter for the individual to decide, but it is more important than a lot of new hunters think. I've reached this conclusion after some personal experiences and interviews with dozens of hunters: certain styles of shotguns not only blend with the physical makeup of some hunters but also fit best with their psychological thinking. This may sound a bit dramatic, but it's more truth than poetry.

One idea I can't buy is that three shell setups are necessary for sure kills. Few times will any hunter be able to get off a third shot while game is still within the effective killing range of his shotgun. The third shot should be for "cripples" only. This doesn't mean that semi-automatics and pumps should be immediately traded for doubles or over/unders,

AS BLAIR HOOKS watches, Helen Lewis prepares to drop a squirrel with her M521 Remington, 6x Unertl. Hooks is carrying a M75 Winchester, 10x Litschert.



but I am suggesting that the three shot outfit doesn't offer more in firepower. The shotgun buyer should do some soul searching and buy according to his needs.

My mail indicates that enthusiasm for squirrel hunting with the common 22 rimfire cartridge is spreading around the state. More and more hunters of both sexes are realizing the challenge in pitting their skills against the speedy tree climbers. Most of my letter-writing friends seek advice on what 22 rifle to buy. Perhaps I can answer most of those letters right here in this column.

There are two approaches to rimfire squirrel hunting. Maybe I have overdone it a bit by continually suggesting the special rifle theory. I really didn't mean to give that impression. Actually, any good shooting conventional 22 can be used with moderate to good success. The rifle should be shot at 50 yards from a solid rest with a variety of ammo, and if it groups 1½" or less with one brand, it has the potential for squirrel shooting. In testing several hundred over-the-counter 22s of all types and ages, only about half met this requirement and bolt action outfits dominated.

The heavy-barrel semi-target rifle has always given me tighter groups from the benchrest. Remington's 540XR and Savage's 64 Anschutz come under this category. There may be some additional machine work to install a 6X target scope, but the strange-looking, bulky outfit will do just as well in the squirrel woods as from the benchrest at 50 yards. The extra weight may cause some concern, but few squirrel hunters do that much walking, and I genuinely appreciate the weight of the semi-target rifle as the years take their toll on my nervous system. It sure makes aiming a lot easier.

Some of the new models I've tested are definitely conventional types found on store shelves, but the groups I shot nearly equalled the heavy-barrel versions.

Remington's 581 Model stayed under 1¼" with Remington standard velocity ammo, and dropped to one inch with their target fodder. Ithaca's Model 72 Saddlegun turned in a respectable performance with both Eley Red and Black Box ammo. I think these tests should indicate that it's to the hunter's advanage to mate a particular brand of fodder with his rifle. Not all long rifle shells shoot the same in one gun. I have reduced groups in half with an ammunition change.

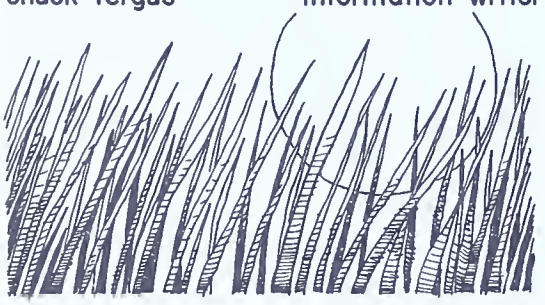
Set Trigger Advocate

Helen always is taken by a rifle's looks, and when Interarms sent me their Walther KKJ Model 22 rimfire, she put her stamp of approval on it immediately. I think the first thing that caught her eye was its distinctive-looking stock, and being a dyed-in-the-wool set trigger advocate, she was further won over by the double triggers on the KKJ. The real proof of the Walther's worth came when she fired ⅝" groups with three brands of target fodder. It's not an inexpensive rifle, but its looks and ability to group offset its price.

The high point of this column is to get across the fact that you should NOT buy a hunting gun because it's "on special" or because a savings of 30 percent or more can be realized. What's a few extra dollars spent now going to mean over the next 10 or 20 years, if the hunting gun turns in a superlative job? I would rather have one hunting gun that meets my needs and improves my score than to have a dozen other outfits that just take up space. Don't just fill a gunrack with guns—make the right decision now, and you'll be taking a giant step toward solving the hunting gun problem.

In the wind

chuck fergus information writer



The 27th annual International Whaling Commission recently met in London and adopted new management procedures to establish commercial whaling quotas. These measures will be designed to protect all stocks of whales which the IWC's Scientific Committee estimates are more than 10 percent below the maximum sustainable yield level. Total whale harvest quotas have also been reduced by 8000 for the next year.

—National Wildlife Federation

Pesticides are wiping out honeybees worldwide at such an alarming rate that some agriculturists want them declared endangered. A 20 percent drop in American bee colonies in the last 10 years is particularly troubling, because of the key role bees play in increasing yields of fruits, berries and crops such as soybeans and alfalfa. Pesticides combine with loss of wild nectar sources to lower the honeybees' numbers.

—National Audubon Society

Sales of aerosol spray cans have declined sharply since scientists advanced the theory that fluorocarbons contained in the sprays may be depleting the stratospheric ozone layer. According to THE WALL STREET JOURNAL, product sales last year were down as much as eight percent.

—National Audubon Society

President Ford recently modified an order banning use of poisons to kill predators on public lands. The President's directive will permit efforts to develop "environmentally sound" uses of sodium cyanide, a poison which does not produce secondary effects. (The carcass of a cyanide-killed animal will not poison some other bird or animal that eats the carcass.) The President, however, resisted pressure from the sheep industry to rescind the entire ban or to permit use of poisons with secondary effects.

—National Audubon Society

Much of Calsbad Caverns National Park, N.M., has been placed in a natural burn zone. Fires started by natural causes will be allowed to burn, under constant surveillance, and be put out only of they threaten to leave the designated area. All human-caused fires will be suppressed. The zoning will provide information on the role fire plays in the continued survival of certain plants and animals.

—National Park Service

Three Mauritius kestrel chicks were produced this year by one of two remaining wild pairs. A third pair, bred last year in captivity, hatched one chick, but it died in an incubator accident. The population of this rare species now totals nine.

—World Wildlife Fund

The U.S. Army Corps of Engineers, often criticized by environmentalists, is drawing unwarranted—but predictable—flak from land developers and politicians over its lakeshore management regulations. The new rules, endorsed by conservationists, protect lake esthetics, establish and maintain acceptable fish and wildlife habitat, and promote safe, healthful use of lakeshores for public recreation.

—National Wildlife Federation

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Pennsylvania Seasons and Bag Limits 1975-1976

The Pennsylvania Game Commission, in Harrisburg on June 4, 1975, established the following seasons and bag limits for resident game and furbearers for the 1975-1976 hunting license year which begins September 1.

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 25 will be 9:00 a.m., D.S.T. Shooting hours for other days and seasons will be from one-half hour before sunrise until sunset except turkey gobblers (spring season) from one-half hour before sunrise until 11:00 a.m., D.S.T., and raccoons which may be hunted any hour except during the firearms deer seasons when the hours are from sunset to sunrise. Seasons and shooting hours for migratory birds will be announced later.

Daily Limit	*Field Possession Limit*	SMALL GAME	DATES OF OPEN SEASONS *First Day*	*Last Day*
6	12	Squirrels, Gray, Black and Fox (combined)	Oct. 11	Nov. 29 AND Dec. 26 .... Jan. 17, 1976
2	4	Ruffed Grouse	Oct. 11	Nov. 29 AND Dec. 26 .... Jan. 17, 1976
4	8	Rabbits, Cottontail	Oct. 25	Nov. 29 AND Dec. 26 .... Jan. 17, 1976
2	4	Ring-necked Pheasants, males only (except in designated area)*	Oct. 25	Nov. 29
		—both sexes in designated area*	Dec. 26	Jan. 17, 1976
4	8	Bobwhite Quail	Oct. 25	Nov. 29
Unlimited		Raccoons (Hunting)§	Oct. 25	Feb. 28, 1976
Unlimited		Woodchucks (groundhogs)	Closed Nov. 30 to June 13, 1976; Open Rest of Year	
Unlimited		Squirrels, Red§	Closed Oct. 1-10	
Daily Limit	*Season Limit*			
1	1	Wild Turkey—Northcentral and Southcentral Areas**	Oct. 25	Nov. 29 (Except Nov. 24)
		—Peripheral Areas	Oct. 25	Nov. 22
1	1	—Spring Gobbler Season (bearded birds only)	May 1	May 22, 1976
2	4	Hares (Snowshoe Rabbits) or Varying Hares	Dec. 26 .... Dec. 27 AND Jan. 1, 1976 .. Jan. 3, 1976	
		NON-GAME		
Unlimited		Crows	Jan. 19, 1976-Apr. 14, 1976 AND Jul. 1, 1976 .. Aug. 7, 1976	
		BIG GAME		
1	1	Bear, over 1 year old, by individual or by hunting party of two or more	Nov. 24	Nov. 24
		Deer, Archery Season, any deer—Statewide	Sept. 27 .... Oct. 24 AND Dec. 26 .... Jan. 17, 1976	
		Deer, Antlered, with 2 or more points to an antler or a spike 3 or more inches long	Dec. 1	Dec. 13
1	1	Deer, Antlered, and Antlerless with required antlerless license, buckshot only in Special Regulations Area listed below***	Dec. 1	Dec. 13
		Deer, Antlerless—Statewide	Dec. 15	Dec. 16
		Bad weather or inadequate harvest extension	Dec. 20	
		—Counties, and parts of, listed below****	Dec. 15	Dec. 20
		Deer, Antlered and Antlerless—with specified muzzleloader on designated State Game Lands*****	Dec. 26 .... Dec. 27 AND Jan. 1	Jan. 3, 1976
		FURBEARERS		
Unlimited		Skunks, Opossums, Raccoons, Foxes, Weasels§ (traps)	Nov. 27	Feb. 28, 1976
Unlimited		Minks§	Nov. 27	Jan. 17, 1976
Unlimited		Muskrats (traps only)	Nov. 27	Jan. 17, 1976
3	3	Beavers (traps only)	Feb. 14	Mar. 14, 1976

NO OPEN SEASON—Cub Bears, Elk, Otters, Hungarian Partridges, Sharp-tailed Grouse, Bobcat or Wildcat. NO CLOSE SEASON—Chukar Partridges.

For special regulations concerning deer, pheasants, turkeys and beaver, consult the 1975-76 Hunting and Trapping Digest.

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COVER PAINTING BY NED SMITH

Few sights stir an upland hunter as much as a gaudy long-tailed ringneck exploding upward from a nearby weed patch, raucous voice squawking, wings clattering, brilliant feathers catching the sun like polished copper and bronze, black-green-purple head gleaming iridescently above his snowwhite collar! It's memories of such sights that help a hunter through the long winter months and bring him back to Pennsylvania's fields in following falls. Ned Smith's painting shows this great gamebird in all his splendor. Nobody, at any time or any place, ever did it better.

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EDITORIAL . . .

The BS of CBS

IN A MINI-EDITORIAL in the September issue we called attention to the then-upcoming CBS-TV show, "Guns of Autumn." Though it was billed as a documentary, we expressed skepticism about it, having learned from experience what CBS-TV and radio tend to express about guns and hunting. Our fears were well founded. In a medium that's been accurately described as a vast wasteland, "Guns of Autumn" reached a new low. In our opinion, it's the worst program to ever appear on television.

The mail indicates most of you agree. It would be impossible for any experienced hunter to think otherwise. "Guns of Autumn" distorted the facts. When told this, the network declared that everything shown actually occurred and therefore was true. On the surface, that seems like an irrefutable reply. Yet, though what they showed did happen, their presentation was a lie. The explanation is simple. They showed only part of the story. An infinitesimal part. And when you don't tell the whole story about a subject, when you pick and choose scenes to portray a viewpoint that you want to make while repressing everything that conflicts with that viewpoint, the end result is not objectively valid. When a person is sworn in during a trial, he swears to tell "the truth, the *whole* truth . . ." This, CBS did not do. Almost no time was given to typical hunting. Rather, the show was devoted to nontypical episodes derogatory to sport hunting: commercial shooting grounds where for a fee—one that's far too high for any average sportsman to pay—fenced-in animals may be shot within a few yards of the vehicle; ghastly stretched-out scenes resulting from poor shooting; killing "dump" bears; culling buffalo herds, etc. There is no denying that these things are done (some, as the buffalo culling, justifiably, others reprehensibly). However, they are done by only a tiny fraction of the hunting group, a portion that doubtless parallels the percentage of our entire population which takes part in questionable, immoral or illegal acts in daily life. Hunters include individuals from all walks of life—criminals as well as the lawyers who prosecute and defend them and the judges who sentence them, doctors, teachers, politicians, bums, priests, philosophers, skilled workmen, what have you—and all economic groups, from the poorest to the fabulously wealthy. Many of us have worked for years to abolish the slob hunter, but so long as we have slob citizens we will have slob hunters, for buying a hunting license does not change a person's character. But to portray the slob as typical of the whole is like selecting the goriest episodes from the life of John Dillinger or Charles Manson and saying they represent moments from the life of the average American citizen.

Yet that is what CBS did. We wonder why. Various explanations are possible. Perhaps they wanted to create a show that would cause a great reaction, boost viewer ratings and in general stir things up. (If so, they achieved their purpose.) Perhaps they believed they were doing a public service, that by concentrating attention on what they consider the evils of hunting they could help correct them. (In that case, it's doubtful that "Guns of Autumn" should qualify as a documentary.) Perhaps this was

(Continued on page 29)

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THE FLIGHT'S IN!

By Sam Hossler

OCTOBER is a month of many moods and means different things to different people. The vivid fall colors which are splashed across Pennsylvania's hills and mountains bring tourists from all the neighboring states to share the beauty and to sample our down home hospitality. October means the squirrel hunter will be able to sit out under an oak tree on a clear, warm day and have a better than even chance of bringing home the makin's of a squirrel pie. And to the bird dog man this month of vivid color means the early grouse and woodcock season will soon open.

No other time of the year is as beautiful as fall or as pleasant a time to be in the woods. Many grouse hunters complain the leaves are too thick during this advance season, and for the most part they are right. Grouse will be flushed and never seen as they dart away under cover of the thick foliage. But the other bird that becomes legal game at this time is a real gentleman. He will wait until you are not only right up next to him before flushing but will also let you get into the most advantageous shooting position while the dog holds him on point. This is our friend the timberdoodle.

My son Scott and I had been enjoying some great October days in the field. This was Scott's first year as a full fledged Pennsylvania hunter. He had turned 12 a few months before and immediately took and passed his Pennsylvania Hunter Education course. Wing shooting is probably not the best way to break in a young hunter but having a bird dog that we feed and train all year long, this is the path I follow.

During the summer we had tossed some claybirds and burnt up some shells, but this is no substitute for real live wing shooting. It was no surprise, therefore, that there were no feathers to show for the first five or six birds that flushed. The woodcock is not easy to hit, in spite of what you read to the contrary. The birds I hunt have never read the book saying they will flush straight up, level off and fly straight away. They have the unnerving habit of corkscrewing to the top of the alders then zigzagging through the branches until you either have emptied your gun or they are out of sight.

In spite of all these difficulties, we had experienced some good hunts during the early season. Most of them were with Lou Fruhlinger, who has taught me more about timberdoodling than I could have read about or learned from experience in 100 years. Under Lou's coaching Scott had harvested his share of birds on our hunts, after he got the hang of handling his gun and knowing what to expect. And I must admit a single-shot shotgun is not the easiest outfit to use for this sport. He and I both missed every easy shot that presented itself on the first day out, but we hit some tough ones later.

One Point on the Edge

We had one point on the edge of a clear cut power line. Feeling sure the bird would cross the opening when flushed, we got into position where there would be clear shooting as he came out. At the flush, out he came just as predicted, only he didn't cross the opening; instead, he turned and flew straight away down the cleared area. Anyone could make a shot like this, right? Well, three shots from my autoloader and one from Scott's single never fazed him. As I said before, these birds have a way of humiliating you.

We had gone through October and were into November when I said to Lou after a Saturday hunt, "Call me when the flight comes in." The birds we had been finding were natives or birds that spent all but the coldest months right in the locations we had been hunting. But when the weather turns cold up north and the ground begins to freeze, the Canadian natives group up and start their migration south. When this happens and you run into one of these flocks, there is some of the fastest shooting you have ever experienced. The dogs go crazy. They can't go ten feet without a point and you are apt to find timberdoodles in the open fields, bramble patches or alder thickets. They are just everywhere. This is what I didn't want to miss. Lou is in the field every day with his Brittanies and would know when the big day arrived.

It was a Friday evening when his call finally came. I had made arrangements to go pheasant hunting the following day, but when the flight comes in everything else stops. A friend of mine, Harry Barnett, accompanied Scott and me the next morning. We arrived at Lou's kennel bright and early. On the way over the mountains I had misgivings about the woodcock staying as there was a fairly heavy frost covering the ground. But I kept telling myself that Lou had just seen the birds the day before, and surely they wouldn't move out so soon. We loaded Snuffy and Freckles, Lou's dogs, in the car and headed for a covert back in the mountains. Lou had stopped there late in the afternoon and he had birds going in every direction.



It took less than a half hour to get to the spot. As we parked and looked over the hillside, frost was everywhere. Just then a grouse came bursting out of a thicket beside the car and flew across the road. It didn't take long to get the bells on the dogs and the guns unlimbered. The grouse was very considerate, as he had landed in a crabapple thicket with a clearing on each side.

Lou took the dogs and started into the thicket while Scott took one side and I took the other. Harry was getting his camera ready but before he had it loaded the bell stopped on Snuffy and Lou called, "Point." He hadn't gotten the word out of his mouth when the roar of wings shook the ground and out came the gray underside of a buzz bomb. It had exploded out of the thicket and my first shot never touched a feather. Swinging ahead of him, I touched off the second shot and down he tumbled. What a way to start the day! Snuffy made the retrieve and we regrouped to plan on how best to attack the timberdoodle flight.

Lou said they were in and around the big blackberry thicket on top of the hill, which was about a mile from where we stood. We decided to hunt our way up there. That way, if we picked up any stragglers it would sharpen up our shooting eye. Off we went, quartering up the hill which was dotted with hawthorn trees in small thickets and an occasional grove of maple trees.

I no sooner thought that it would be pretty nice shooting in these maples than Freckles went on point. We started to move in when he broke point and pussyfooted ahead for five

or six feet, then froze again. This time the bird held and came whistling out of the leaves right at Scott's feet. He and I both had shooting, but even in the open cover we never touched a feather.

On up the hill we worked. The next point was right in front of Harry. It was pretty thick there and we all got in the best position we could. At the flush I couldn't see a thing but I heard Harry's 20-gauge crack once. When I shoot only once it's because I nailed him on that one shot, but there was no call of "dead bird" to bring the dogs in. Finally I asked if he needed help. "No," he said, "the bird is still flying."

At last we reached the blackberry patch and my adrenalin glands were working overtime. Whitewash droppings were everywhere. Obviously there had been a real passel of birds here not long before. Shotguns at the ready, we started through. The dogs were working and showed all the signs of smelling birds around. Nothing! Not one bird was found. To say we were disappointed is an understatement.

"Maybe they just moved to a new location," Lou said. We worked across the top of the mountain without finding a bird, then decided to swing down along the side of the hill and head back toward the car. We'd try another spot we knew held birds—if they hadn't also moved out!

Into the Second Growth

As we started into the thick second growth, Freckles' bell stopped ringing. Then Snuffy's bell became silent. We couldn't see either dog, but they had been right ahead of us. Moving up, there was Snuff honoring Freckles' point. They looked just like a picture. The bird came twisting out in front of Scott who dropped it like a veteran at the top of its rise. The ice was broken. We hadn't found the flight, but there were still birds here.

Snuff had worked up toward the top of the hill again and suddenly she hit a point right out in the open. The



frost had melted and now it was a little easier for the dogs to work. This woodcock came rocketing down over Harry's head and he almost had a straight up shot. The bird folded and Freckles had it on the first bounce. My turn, I kept telling them, but I don't really think they were paying very much attention. Lou wasn't shooting today as he just wanted to handle the dogs. It might not have been a flight but we had enough action to keep everyone busy on the way back to the car. In fact, it was noon before we got there and we had three birds apiece to show for the better than half a box of shells each of us had shot.

After lunch we went back for the two birds we had missed in the morning on the way to the blackberry patch. The dogs had points on the way to the hawthorn thicket right out in the open weeds. The first bird up made the fatal mistake of crossing in front of Scott's 20-gauge and was dropped immediately. This was the wildest thing I had ever seen. We had worked through here not four hours earlier and only put out two birds. Now the dogs were having finds every time you turned around. We had at least ten birds up between the two coverts and finally managed to limit out just about the same time our shells gave out. Since we all were shooting 20's we ended up borrowing shells back and forth. When we got our last bird we had one shell left between us.

The birds had been in the covert all the time. However, until the frost melted and gave the dogs something to work with, we just couldn't find them. But as it ended up, this was sure a day to remember.

Try Weed Fields For Pheasants

By Harris De Forest



THE WEED FIELD was a favorite from years past. We hunted other areas for an hour before we finally got to it. It was almost as though we were purposely avoiding the renowned hotspot. Like a full course meal, our preliminary hunting was the appetizer and the hors d'oeuvre. The big weed patch was entree and dessert. We had just stepped into a corner of the overgrown patch when the first cockbird of the day erupted dead ahead of Scott and me. It was unusual that the two of us would be only scant yards apart. We each had a perfect, near-straightaway shot.

My double came up automatically, and out of the corner of my eye I saw Scott getting into action too. We both suddenly became polite. Each lowered his shotgun, then realized simultaneously that the other was not going to shoot. We both swung our shotguns up, then away again, until the pheasant was far out of range. Why do these doggone birds continue to escape when they erupt at your feet in open cover—and with relatively slow flight? They have a way of mystifying and frustrating gunner after gunner.

Our gun-up, gun-down episode must have looked like an old Laurel and Hardy movie. When it was all

IT CAN BE HARD to flush a ringneck in a weed field—they tend to run rather than fly—but when one does take off in reasonable range, you have a clear shot.

over and the pheasant was safely 150 yards from our unfired guns, we both asked the same question at the same time: "Why didn't you shoot?" Chances are, John Cockbird has frustrated you in a similar manner.

Resigned to the fact that this one had given us the slip, but sure we'd score on the next, we put 30 yards between us and motioned the dog to work the cover in front. It was tough walking in this weed field. It was extra thick and probably hadn't been cut in three or four years. The surrounding cornfield offered staple food for the pheasants and the seeds from all the weeds in this 40-acre plot offered more food as well as ideal nesting and resting cover. Any ardent pheasant hunter could glance at this location and know he'd have a limit in his coat before the day was over.

It was difficult to see the dog. We tried to keep him in close. Suddenly he rammed into one of those points where you know that the bird is but a few inches in front of his nose. The pointer's tail was erect, his eyes wide and intense, his ribs twitched with a vibrant enthusiasm. He was transfixed, oblivious to the world around him, every molecule of his being totally concentrated on that intoxicating scent.

With quail, grouse, and woodcock, such a point always produces a shot. You know the bird is there, you are ready and waiting, and the flush is close to the gunner. But it's been my experience that on such a point with pheasants, you are seldom going to have a shot. It's not that the bird isn't there, or even that he's run off. The dog has come on this pheasant and nailed him before he could pull that maneuver. But cockbirds are wise and wary enough that they almost never let a dog get them in such a situation. Hens aren't so wary, and I remarked to my friend as I walked in to kick up this bird that there wasn't much chance of anything here but a *hen*.

Frustrating

How frustrating it must be for a dog to lock onto game in such brilliant fashion, and then have a hen pheasant fly up from right under his nose—and the hunter not even lift his shotgun to fire. Hens also run from danger, but the cockbirds do it so consistently and well that they're in a class by themselves.

On the next point in our weed field paradise, the pointer's tail quivered just slightly in a wag as we moved up for the flush. As we passed him, he started creeping forward, and both Scott and I knew the chances were better that this time it would be a rooster. For 40 yards the dog alternately pointed and crept, pointed and crept. When the flush finally did come, it was from 30 yards in front of the dog, while he was moving and still trying to unravel the scent trail. I swung to the back trigger of my Mario Beschi double and a 3-inch magnum load of 6s sent the ringneck sprawling end over end in a puff of feathers.

The dog had seen neither the flush nor the fall. Promptly he minded his manners, stopping, honoring my shot, and awaiting the next command. I sprinted for the spot where I had marked the bird down, and was lucky to find him

FOR PHEASANTS, DeForest prefers 7½s in his open barrel, a magnum load of 6s in the tighter choke. This gives him good results for close flushes or long open shots.



dead, exactly where I'd marked him. We released the dog, field-dressed the first bird of the day, and I happily shoved him into my game pocket.

Pheasants are big, hard-to-kill critters. It pays to use heavy loads when you are shooting at distances of 35 yards and more, and it's even more important to center well on your target. Hit a hardy cockbird with the pattern fringe of even a magnum load, and he'll quite likely escape on the ground. Sometimes a pheasant looks like he's been pulverized when he falls from the sky, yet he has only a broken wing. Because they are such heavy, big birds, they fall like a sack of cement. But if you only broke a wing, they hit the ground running. At ranges under 30 yards, field loads are adequate. But if you hit a pheasant with the fringe of the pattern of *any* shot load, even at close range, he still has a good chance of escaping. Center on him wth a 12-, or 16-, 20-gauge field load at 30 yards, and you've got your bird. But *centering* is the key, regardless of range.

In the Keystone State's prime southeastern pheasant country, some gunners hunt the cornfields. I believe none of us should enter unharvested corn. Many farmers have not been able to pick all of their crop at the season's start. Even if the owner permits it, if you've ever hunted in standing corn with a pointing dog, particularly one that likes to hunt and range some distance from the gunner, you've probably found that cornfields and dogs don't mix. For some reason, a hard running dog loses his cool and may take the entire length of a corn row rather than quarter back and forth, searching in front of his master. And if you are in standing corn yourself, the dog can never see you. Indeed, even his hearing is impaired when he is running through

high corn. Finally, even if you're lucky enough to flush a rooster from standing corn, you seldom have a decent shot. These big birds usually level off right at the top of the stalks and are gone from sight in a split second.

You'll have more acceptable results by hunting a cornfield that has been picked, where the stalks are knocked over and lying on the ground. But the cover in such spots is relatively sparse, and pheasants, particularly the wary cockbirds, tend to flush wilder than in areas where they have abundant cover to hide in. These are some of the reasons I favor weed field hunts for pheasants rather than the cornfield variety that so many write about.

On this hunt, two more points in the next ten minutes produced two hen birds. Scott was walking in on these flushes. I was hoping he'd get the next bird so we'd have one apiece. It always takes the edge off our hunting together if either of us scores on two ringnecks before the other has one. But on many days—that's our fate.

As luck would have it, the next one flushed in front of me. But to get the wind, as soon as he was a dozen feet off the ground he started winging to the right in front of my friend's gun. Although I automatically swung into action, I lowered the gun, hoping Scott would have a chance to score on this one. He was carrying a Remington 870 pump, a new lightweight 20-gauge with 2-3/4" short magnum shells. His 1-1/8 oz. load of 6s centered well forward on this pheasant, and sent him somersaulting. There was no doubt that this one wouldn't be escaping on the ground.

Give **Game News** to a friend

We field-dressed the bird, checked our watches, and decided we'd work back to the car for lunch.

It was a warm, sunny day, and we lounged over sandwiches, cookies, and coffe. The dog was hot and tired and appreciated the break even more than we did. After eating, we started away from our parking spot, pushing fresh loads into our shotguns. My Mario Beschi double is a short-barreled outfit, only 25 inches, choked skeet and modified—an ideal combination for pheasants, in my opinion. In the open barrel I use fields loads of 7/8 oz. of 7-1/2s. The modified barrel carries a 3-inch 1-1/4 oz. magnum of load of 6s. This gun is extremely light, has a small fore-end and English grip. Its total weight is about 5-1/2 pounds, and it has a stock custom-fitted to my specifications. Scott's pump has a 26" improved cylinder barrel.

Back to that Weed Field

We spent an hour checking several mediocre pheasant spots, but eventually got back to that weed field where we knew, or at least hoped, we would fill our limits.

For our pheasant hunting days we have several prime weed fields where we know we can depend on plenty of action. Each Saturday that we can get together, we hit one or



more of them. It takes a lot of dog training sessions, scouting trips, and time invested to find all the weed fields that we know so well. But it sure is worth it, and as we entered this hotspot again, I reflected on the benefit of our preseason scouting sessions.

The sun was shining brightly. The liver-and-white pointer was tired enough that he wouldn't be ranging too far and missing the good spots. Instead, he would be a slower, more thorough worker, one that would produce for the gun even a little better than at the start of the day. I was happy I was with a close friend, and I valued the relationship we had. I could *feel* we were each going to take our limit that day.

A brace of hen birds flushed wild. Then we got two startling points, again on hens, before the dog was able to produce a cockbird for us. On this one, the dog pointed and roaded the bird intermittently, working down into a gully along the weed field edge. There the weeds met a patch of honeysuckle near the woods line.

This bird was too smart for us. He got into the honeysuckle and flushed wild while we were still in the weed field and went winging through the thick cover, never offering a shot.

We directed the dog back out into the weed field and renewed our quest for another "great gaudy gladiator," a superb phrase plagiarized from friend Frank Woolner.

Crisscrossed Weed Field

By now we had crisscrossed the weed field several times, but knowing how crafty pheasants always are, we felt certain there were still birds hiding, birds that had squatted motionless while we passed previously, birds that had never been winded by the dog. Weed fields provide the type of cover where cockbirds can be their most elusive.

Scott kicked up the next bird himself. It thundered out from right at his feet. He allowed it to gain some range before pulling his little Remington up and slapping the trigger. It takes a lot of experience in wingshooting not to slip immediately into action. With many pheasant, quail, grouse, or woodcock flushes, it pays to shoot almost immediately. But with each of these birds, there are certain times when your chances of scoring are much better if you maintain your cool and permit the bird to either reach a range where your pattern is most effective, or to wait for the bird to hit an opening. When you arrive at this point in wingshooting ability, you seldom miss a shot when you've held back, concentrated, and fired at precisely

the right moment. Scott did just that, and he pocketed his second bird.

He unloaded his pump, as he was done for the day. Unlike some gunners, Scott and I never consider shooting more than the legal individual limits. This shows that you respect your hunting partner and want to give him every chance to take his own limit.

Finally, when the sun was waning in the west, I filled on bird number two! My legs were tired from plowing through the weeds. On every step here you have to lift your boots high, step up and then forward, 'cause you can't shuffle through the thick cover. Scott flushed this bird and it came back, winging over my head, always a difficult shot for me. I pulled off to the left on the first barrel. The bird was behind me and going away when I gave him the second shot. He crumpled, but I knew it would be tough for the pellets to drive into the vital areas because of the angle presented.

I called for the dog, at the same time racing to the point where he had hit the ground. He wasn't there. Fortunately, the dog was soon on the scent. He lost it several times, and for awhile both Scott and I wondered if we were going to lose this bird. But five minutes later the pointer found the ringneck under a clump of grass, not far from where he had hit terra firma.

After such a rewarding day, it's impossible not to head for home with a happy heart and renewed respect for the hunting way of life and for those tough old roosters, too!

NOVEMBER, 1975



The MONSTER Of Shanty Point

By Daniel Dean

IN A WAY, the hunt really began in December, 1973. A friend of mine, Bob Schrecengost, assembles custom rifles for his family and close friends. I asked Bob to build one for me.

I finally got the gun in August of 1974, and it was a real dandy with a commercial Mauser action and barrel chambered for the 300 Winchester Magnum cartridge. The thumbhole stock was made of Hawaiian koa wood and I added a 3-9X scope. I figured a gun of this stature shouldn't have a store-bought sling, so I asked around to find someone who did leather work. That's how I met Larry Thompson, a retired conductor from Union Railroad, the same one I work for. When I met Larry at his home, we sat around most of the afternoon and swapped hunting tales. I told Larry that the thing I was most interested in bagging was a bear. Then he told me about the camp he belonged to in Lycoming County; Larry has been a member for 40 years and has seen 12 bears taken there.

The camp is on top of Cornwall Mountain just outside of Trout Run, about 15 miles from Williamsport. The camp owns 2640 acres, mostly wooded hollows and mountains, which make very good bear country. In 1921, some lucky hunter took a 531-pound monster there. All of this bear talk had me oiling my gun and spending a lot of time at the rifle range in preparation for my annual trip to Tionesta in Warren County.

A couple weeks later Larry finished my carrying strap—an exceptional piece of leatherwork. He told me he had gotten permission at the camp's quarterly business meeting for me to accompany him and his son Ladd for bear season. I had the gun and a good place to hunt—all I needed was a crack at a black bear.

During the 4½-hour drive to camp, Ladd told me about a bear he had wounded. It had run down the mountain to another camp's land, where it was killed by a member of that camp. I was confident in both myself and my gun. The load I was using was 72 grains of 4350 powder behind a 180-grain Nosler bullet. This combination gives a velocity of about 3000 fps and consistently shoots 1½-inch groups at 100 yards. On the way to camp I also studied a topographic map of the area.

We arrived in camp at noon. After lunch and introductions to the other members, Ladd and I took a walk around part of the camp property. We hiked out along the edge of a hollow and Ladd pointed out the stand where he normally posted. Then we rounded a point and started up the rim of Cool Springs Hollow. Ladd showed me his father's tree stand—called Fort Larry, because of all the bears Larry has missed there—and, farther on, a spot called Shanty Point. On our hike we found quite a few bear droppings.

We returned to camp for a big pot of beef stew and a lot of good-natured kidding and ribbing about past hunts. That evening we all gathered around the fireplace and made plans for the next day's hunt. I figured I was in good company, because the 15 men in camp had taken a total of seven bear. Bud Barnett had shot three, Dick Leya three and Dick Fitzroy one. That night I went to bed with

visions of black bears in my dreams. Needless to say, I didn't sleep too well.

The morning dawned to a heavy consistent rain. This didn't bring my hopes down too much, though; I was ready for a bear hunt. Larry and Ladd would go to Ladd's spot, and I decided to go on further to Shanty Point. Dick Leya and his boy would go to Fort Larry. The other fellows went to points around Slide and Cool Springs hollows. This made me feel like I had the best seat in the house—if these men missed a bear, I figured it would run near me.

I reached my spot and found a rock that gave a good view of both hollows and posted there. The rain turned to snow around 8:15 and completely blocked the view of the hillside across the hollow. I was soaked and cold, and I told myself that I would quit at 9 o'clock. I looked at my new gun. Melting snow and rain water were rolling off it. All I could do was shake my head.

Suddenly, I heard a loud noise behind me. Turning, I saw the greatest sight of my hunting career.

Looking up the hill directly at me, about 75 yards away, was a bear. It kept looking up and around as if wondering where it should go. The minute it turned downhill, I grabbed my gun, pulled the scope covers off, adjusted the scope to 3x, sighted behind the bear's front leg and pulled the trigger. As the gun recoiled and came back on point, I saw the animal rear up and flop over backwards.

Gun Jammed

Trying to keep my eyes on the bear, I didn't work the bolt hard enough and jammed my gun. After I had cleared it and reloaded, I saw the bear moving down the hill. Thinking it was getting away, I held the crosshairs on the neck and fired. Only later did I realize the bear was already dead, and that its head was facing uphill as it slowly slid down.

After my second shot, the bear started rolling faster. I reloaded and started down after it. Finally, the bear came to rest against a dead tree it had knocked down in its fall. While approaching, I was a little apprehensive. It looked so big—bigger than I'd imagined a bear would look close-up.



DAN DEAN and his big Lycoming County bear. It took a large gang of men many hours to get the 500-lb. monster out of the woods.

My hunt was over; the big bruin was dead. I touched the bear to make sure it was real, set my gun down and gave the loudest rebel yell you ever heard! Most of the men in the area heard it. After tagging the animal, I started back uphill to camp for help. The hill was so steep it took me almost an hour to climb to the top, and I realized it would be impossible to get the bear up. As I

climbed, I left a trail of blaze orange articles to help guide me back.

Quite a few men were already in camp, and everyone shook my hand and asked how big the bear was. This was the first one I'd ever seen in the woods in nine years of hunting, and I said I guessed it would weigh around 300 pounds. Everyone laughed and said I'd probably shot a black squirrel and was just exaggerating.

Discussed Ways

We discussed ways of getting the bear out of the woods, eventually deciding most of the men would try to reach it by going up Cool Springs Hollow to Slide Hollow and then up to him. They had a six-wheel ATV and loaded it in a pickup for the trip down the mountain, up the road and then up the hollow. When I said I didn't think the bear would fit in the ATV, the whole camp laughed. Little did they know that this was the beginning of the hardest work most of us had done in a long time.

Five of us went back down the road to locate the bear from above and get it down to the creek in the hollow. When we reached the bear, these men couldn't get over its size. Instead of my guess of 300 pounds, these more-experienced men said it weighed 450 pounds. We had a rope and some clothesline, but the only way we could get the bear down the mountain was to roll it. This turned out to be the easiest part of the task: one push and the bear would roll 50 yards or farther, until it would hit a tree and stop.

When we reached the bottom there was still no sign of the men in the ATV. We walked down to meet them. The ATV had only made it up about a mile, and the Scout could only come about a half-mile. That left us with the task of transporting the bear three miles to the vehicles.

The thought foremost in our minds was to try not to damage the hide. On top of the mountain it was snowing, but where we were it was rain, which made dragging tough. First we tried to tie the bear to a four-inch-thick tree and carry him out. No way —the pole immediately bent in half. The only thing left to do was to try dragging. A big rope was tied around the bear's neck, with two long leads for two groups of men to drag on.

The easiest way was down the center of the hollow through the creek. At places we floated the bear and pulled on the two leads, and at other times we just plain pulled, all the while standing knee-deep in icy water or on slippery rocks. When we finally got to the Scout, it was all we could do to get the wet and slippery bear into the back.

The trip to the weigh-in station was cold and quiet. Everyone was exhausted. At the station, a crowd of hunters gathered to see the bear and Game Commission personnel examined it. They tried to weigh it, but because of its size this was impossible with the equipment they had.

On the way home that night, the only place we could weigh it was at a truck scale in Milesburg. When the computer ticket came out of the machine and read exactly 500 pounds, we couldn't believe our eyes. The next two days were also unbelievable. It seems like a thousand people came by my house to see the big bear—up the steps, down the steps, inside, outside, continually. I must have told the story 500 times. But you know something? I enjoyed it better every time.

We Know Where It Is

The stinger of a bee is located at the tail end of the abdomen.

The Sportsman and the Social Sciences

By Hank Rosen

FOR THE PAST several months, we have seen how the sportsman of Pennsylvania can make his expertise known to the educational community through the use of the school library and the science programs. This month, we will devote several paragraphs to the social studies program, keeping in mind that the expertise of the sportsman, the man who is interested in the outdoors, the man who is up-to-date on environmental issues, can always provide help to the inquisitive mind of the youngster.

Social issues are one of the few remaining areas wherein public sentiment has a direct impact. That does not mean we advocate that the Pennsylvania sportsman get on a bandwagon and go politicking; to do so would just label him as a propagandist or, at best, a lobbyist. If on the other hand, the Pennsylvania sportsman can become involved in the ongoing program of the school as a source of information, a clarifier, a man whose many years of experience have given him a position of prestige among the members of the community—then he may make a viable contribution to the social studies program of the local school.

Some years ago, I was asked to become a resource person for a Boy Scout camporee. My talks were to be on firearms and their impact in American history. Having spent some years collecting antique guns, I saw this as an excellent opportunity to present history through the eyes of the martial arts. Many, many years before that, while a classroom teacher in a metropolitan area, I was astounded at the amount of interest I was able to generate for history when, with the principal's permission, I brought several of my old firearms into class. I was astonished to see how boys and girls who were turned off by the study of history in books had a complete change in attitude when given the opportunity to carefully handle firearms which dated back to the Revolutionary War. Suddenly there was a feeling of reality in the situation. In their hands they literally held a direct connection with the life and times and conditions which existed almost 200 years earlier. History suddenly became real to them. It was not just dry words and dates on the pages of a book, but a part of their lives. Later on, I embodied this technique into several courses of study which were being written in the social studies field as a "hands-on approach" to American history.



LETTING YOUNGSTERS examine early firearms or other historical items gives them a direct link with the past, helps them to realize they are part of the overall picture.

Following my sessions with the camporee, I was literally beseiged by Boy Scout troops who wanted individual presentations. At that point, it became apparent that the hands-on approach, which to the social studies is an area that must be fostered, had to be increased. It's through the study

of social sciences that our young people gain perspective in time and distance, and it is through these kinds of perceptions that the reality of man living with man comes out.

If your organization has members who have collected pieces representative of periods in American history—various accouterments, uniforms, firearms, even documents relating to early Americana—they can provide excellent adjuncts to the history teacher who is trying to get young people to understand the complex situation we call American civilization. Your local organization, through the use of displays (far more modest than those exhibited at the National Rifle Association annual meeting, perhaps, but of the same kind showing history through the various classes) can make an impact. I know one man who collected so-called Bowie knives. From this he went into the knives of gamblers and things of that sort. When given the opportunity to address a class studying the western movement of the United States, he made it live, he made it vital, he made it real. By passing around several pieces from his collection, he recreated the feeling of the era. Youngsters got an additional awareness of the needs of the gold rush pioneers.

While history is important in the social studies field, the concept of place—geography—is also important. To tell a youngster from northeastern Pennsylvania about the Cumberland Gap is a far more difficult thing to do than to show slides or movies which reveal its importance as an opening to the West. The explanation of place names can be interesting. "Tionesta," though beautiful in itself, is more meaningful if you explain that it's an Indian name meaning "where the wolves crossed the water." Slides or photos concerning specific areas of our state can be most important, and many sportsmen have such material. For instance, I used to talk to my classes about Tom Quick, the Indian fighter of northeastern Pennsylvania. To add interest, I showed my students photos of statues erected to him and told them where they were erected. Such things bring both history and geography closer to the student, make it more personal.

Sportsmen traveling anywhere in the state can bring back veritable treasures to the youth of their communities. And when talking about these things, you can introduce the concept of distance. Very young students often have trouble understanding this. If they haven't yet traveled much, miles have little meaning for them. If you explain that it will take about half a day in a car to drive from Philadelphia to the Black Moshannon region in the center of the state, say, or if you tell a Pittsburgh youngster it will take that long to reach the headwaters of Tionesta Creek, they will have a clearer idea of these things.

The sportsman has a unique opportunity here, particularly in this day of wildlife management, resource usage, pollution control, and the harvesting of animals. All of these are areas where the sportsman has a great stake. By virtue of the fact that he travels extensively and spends large amounts of money in pursuit of his hobby, he is able to speak with expertise.

Again, as I stated in a previous article, the expert's bureau, the speaker's bureau, the home movie, the many slides, the posters, the displays—all of these can have a direct bearing on the ease with which our young people learn the social issues which confront us as a society.

The sportsman is a unique person, and a unique service can be made available through him to the youth of our state.

This article is the last of a three-part series by Mr. Rosen, a school superintendent in the northeastern part of the state. The first two articles appeared in the September and October issues.

The State Police Crime Lab is . . .

THE LAW'S LONG ARM

By Chuck Fergus
GAME NEWS Staff Writer

THEY SAY the law has a long arm. A lot of criminals know this is true, for not only do law enforcement agencies use space-age communications to reach across continents and nab fugitives, but they also use scientific research to stretch that long arm even farther—into our state's fields and forests to convict game law violators.

The Pennsylvania State Police crime laboratory helps commonwealth law officers, including game protectors, link lawbreakers to fragments of evidence—everything from bullets to bloodstains to handwriting—through tests performed by the crime lab's ballistics, chemistry and documents divisions. Support from the lab often results in a conviction which otherwise would have been impossible.

The lab's function is to examine evidence from criminal cases, including violent crimes like murder, rape, breaking and entering and assault. It provides modern, scientific testing of evidence for the state police, local police departments and other law enforcement agencies, the Game Commission included, throughout the state. Experts from the lab also testify at many court trials.

The following example is from the files of our Division of Law Enforcement.

In September, 1974, Lebanon County District Game Protector Perry Hilbert got a tip that a known poacher had been jacklighting deer in the northeastern section of his dictrict. The area includes State Game Lands 211, near the Dauphin County line. Hilbert patrolled the area but found nothing amiss.

Small game season came and went, and Lebanon County hunters took to



GERALD STYERS, head of ballistics at the Harrisburg crime lab, fires suspect gun into water tank. Slug can be recovered and subjected to a number of ballistic tests.



CUMBERLAND COUNTY DGP Jim Filkosky brings in rifle with a request for laboratory analysis. Melinda Weinhold logs the gun in.

the wooded hills and ridges in search of deer. On December 3, the second day of buck season, a local sportsman told DGP Hilbert that there was a dead 9-point buck near the Gold Mine Road on SGL 211. The game protector found the deer in a wooded area about 50 yards off the road. At first, Hilbert thought the big buck might have been wounded and then lost by a deer hunter; however, it was decomposed, indicating the animal had died at least two weeks prior to hunting season.

When Hilbert took a close look at the carcass, he found a small hole in the deer's skull just above its eye. Later, the game protector opened the skull and found a small, extensively mushroomed bullet. It looked as if it had been fired from a 22 rimfire.

Hilbert put two and two together. The deer had obviously been shot by a violator—probably jacklighted—and this was the area where the poacher reportedly had been operating. Hilbert guessed that either an approaching auto had frightened off the man, or that he had thought he'd missed the buck and left without finding it.

The game protector now had a bullet for evidence and a suspect, but nothing that would support a prosecution or result in a conviction. So Hilbert saved the bullet. He kept his eyes and ears open, and one night three weeks later he got a tip that the poacher had just killed and butchered a deer. The game protector staked out the man's residence and stopped him as he drove down the lane to his house.

In the front seat of the suspect's vehicle were a spotlight and a Marlin 22-cal. bolt action rifle. A search revealed no venison, but Hilbert found several deer hairs in the trunk and a passenger in the car had what appeared to be blood on his hands. Hilbert had a hunch that the Marlin, which belonged to the suspect, was the same gun that had been used to kill the 9-point over a month earlier.

The game protector took the rifle for evidence. He sent it and the slug earlier removed from the dead deer to the State Police crime lab in Harrisburg. Here, Trooper Gerald Styers, who heads up the ballistics section of the lab, went to work on the gun and bullet. Styers confirmed that the defendant's rifle had indeed fired the projectile removed from the 9-point buck. When confronted with this evidence, the defendant admitted killing the deer and paid a $300 fine. His rifle was confiscated as a mandatory part of the penalty.

This was the second time that evidence verified by the crime lab had incriminated this particular man. In 1971, Hilbert had successfully procecuted the defendant for killing a doe on the Indiantown Gap Military Reservation; as in the 1974 case, the crime lab conducted a ballistics test and matched a 22 bullet to the defendant's rifle.

"Some people never learn," mused Ron Sutherland, Game Commission Law Enforcement Assistant, as he thumbed through the Lebanon County man's arrest record. "Loaded rifle

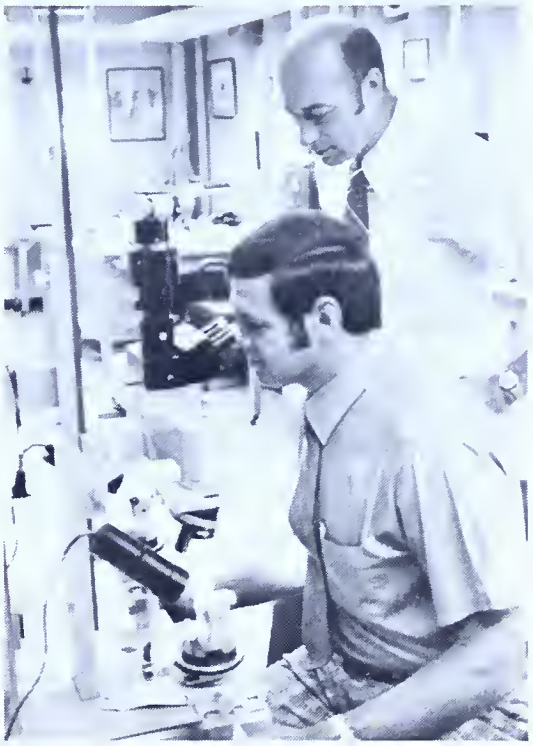
in vehicle, attempting to locate deer with artificial light, killing doe deer in closed season, killing a deer with 22-caliber rimfire cartridge. This guy's a real bad apple."

A former Erie County district game protector, Sutherland now works in the Commission's Harrisburg office and is go-between for the PGC and the State Police crime lab. He says the lab processes approximately 35 Game Commission cases each year, mostly deer violations.

Sutherland works closely with Lieutenant James Sagans, director of the lab, who administers both the central facility—located at State Police Troop "H" Headquarters in Harrisburg—and the four regional crime labs in Wyoming, Bethlehem, Greensburg and Erie. All five labs have well-equipped ballistics, chemistry and documents sections. As they're spread across the state, the labs are within convenient traveling distance of law enforcement officers who need to have evidence evaluated.

Last year, the Game Commission issued copies of the State Police "Crime Laboratory Operations Manual" to its personnel. This manual tells an investigating officer how to handle physical evidence found at the scene of a crime, whether the crime was committed against a human being or wildlife. The manual covers searching for, collecting, marking and preserving evidence, and also outlines procedures for submitting the evidence to a crime lab.

Suppose a game protector needs to know if a certain bullet has been fired from a suspect's gun. After securing the firearm for evidence, he records its serial number and marks the suspect bullet in a manner that does not damage any powder residues, striations or markings. Then he takes both gun and slug to the ballistics section of the nearest regional crime lab. (Most Commission cases end up in ballistics, mainly in autumn and early winter when deer poaching goes into high gear.) At the lab, experts con-



GAME COMMISSION LEA Ron Sutherland, who works in the Commission's Harrisburg office, looks on as Trooper Styers examines a pair of slugs.

duct tests that may ultimately incriminate—or exonerate—the suspect.

One such ballistics expert is Trooper Gerald Styers. He trained for two years in the Harrisburg crime lab before taking over there as head of ballistics in 1974. A big affable man, Styers says, "We have an excellent working relationship with the Game Commission. We bend over backwards to help them, and they do the same for us."

When Sutherland and I visited the crime lab at Troop "H" Headquarters, Styers demonstrated some of the equipment used in his section. At one point, he pulled out a chair and got behind an impressive-looking outfit called a comparison microscope. Made by the Leitz company in West Germany, this 'scope cost around $14,000 and produces magnifications of 17-30X. Each regional lab also is equipped with this type of microscope.

Styers clamped two bullets into the



HAROLD FREED, head of chemistry section of the Troop "H" lab, conducts test to determine if sample is deer blood.



TROOPER WAYNE POUST is a trainee in the ballistics section. Here he checks bullets under the comparison microscope.

machine and slowly turned a pair of knobs until the slugs came into focus. Separated by the split screen, the bullets were superimposed optically so that the nose of one overlay the tail of the other; striations, which looked like bright streaks and dark shadows on the coppery surfaces, matched on both projectiles and confirmed that the two slugs had been fired from the same gun.

Styers explained that each gun engraves a unique pattern of these marks, called "accidental characteristics," on the bearing surfaces of all the bullets it discharges. These marks are made by minor imperfections or irregularities caused when the barrel was bored. Therefore, if a bullet is recovered from an illegally killed deer (or from a human, wall, tree or whatever), it probably still will bear marks made by the gun that fired it. These are sometimes evident even if the bullet is badly deformed or part of it has fragmented.

Should a suspect gun later turn up, Styers fires it into a large water tank and recovers the bullet for comparison with the fatal slug. If the accidental characteristics match, both bullets were fired by the same gun. This evidence is acceptable in court.

Styers and Trooper Wayne Poust, trainee in the ballistics section, can also examine bullets for "class characteristics." These are marks produced on a slug by the lands and grooves inside rifled barrels. A Nikon profile projector is used when no comparison with another bullet is needed. This optical device enlarges and projects an image of the slug onto a screen. By closely scrutinizing the projected picture—and noting the number, width and angle of lands and grooves—ballistics experts can narrow down the list of possible manufacturers or make of the firearm that discharged the bullet.

Guns also leave marks on cartridge cases—scratches and indentations made by clips, firing pins, bolt faces, extractors and ejectors. These marks can reveal the type of weapon used and whether or not the cartridge case was fired in a specific weapon, providing the firearm is available for test firing and comparison.

Marks on the primer or cartridge case head are caused by the bolt face, against which the head of the cartridge rests. The bolt face is covered by a number of fine lines made by manufacturing tools. When the cartridge is fired, the force of the rapidly expanding gases drives the head of the cartridge case back against the bolt face. In many cases, the soft metal of the primer will take a perfect impression of the lines on the bolt face. Because each bolt face bears a dis-



SERGEANT JAMES KING handles PGC cases such as license and big game tag alterations.



LIEUTENANT JAMES SAGANS, left, director of the crime lab, examines powder pattern with Sutherland and Styers.

tinct pattern, often a fired cartridge case can easily be linked to an individual firearm.

In one investigation, a game protector in northwestern Pennsylvania suspected a juvenile of shooting a deer illegally. The officer found a cartridge case at the scene of the violation, but the bullet had passed through the deer and was lost. He secured the suspect's gun for evidence. In an attempt to prevent identification of the rifle, the suspect had altered the gun by filing the firing pin and scratching one side of the bolt face.

In the crime lab, Trooper Styers could not pick up extractor or ejector marks on the brass casing. But even though he had only a cartridge case and half a bolt face to work with, Styers easily got enough sound ballistic information to legally prove that the cartridge had been fired in the suspect's gun. The juvenile was found guilty.

Chemistry Section

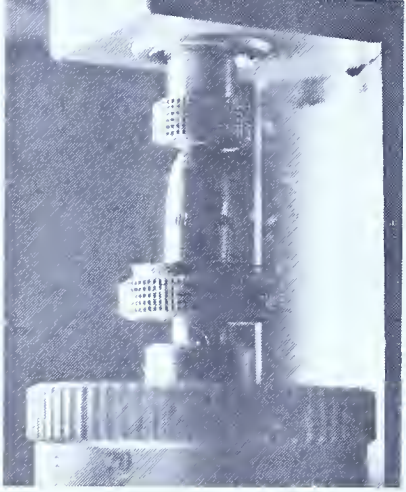
Harold Freed heads the chemistry section of the Troop "H" crime lab. Although this section doesn't handle as many Game Commission requests as does ballistics, Freed nevertheless works on a number of Commission cases each year, ranging from identifying elk meat to determining poisonous substances that might have killed game birds or animals. Chemistry sections of the regional labs also handle PGC casework.

As with ballistics, most cases deal with illegal deer kills. Freed often is asked to identify venison confiscated in a search or deer hair and blood samples taken from trunks of automobiles. Freed can distinguish deer meat and blood from those of bear, elk, other game and domestic animals.

Sergeant James King runs the documents section of the Harrisburg crime lab. Occasionally he handles Game Commission cases, things like alteration of licenses, re-use of big game tags and the purchase of several hunting licenses by one individual.

Technicians working for Sergeant King use infrared and ultraviolet photography in much of their work. With these special photographic techniques, they can "see" through concealing substances to detect writing that has been scribbled over with a different type of ink. Or they may use strong lighting and microscopic examinations to reveal carbon deposits or eraser particles embedded in paper fibers (which could prove that a hunter was attempting to re-use a tag to take a second deer).

King says many of the Game Commission cases his section works on are "really difficult. Violators often fill out their tags lightly and write in



GUNS LEAVE marks on the bearing surfaces of all bullets they discharge.

pencil. Also, the paper may get wet or stained with rain, deer blood or dirt."

Signature comparisons may help show that a person bought several hunting licenses for the purpose of killing more than one deer or turkey. For instance, one man could buy four licenses under the names John Johnson, J. Henry Johnson, John H. Johnson, and J. H. Johnson, in each case verifying his name with a driver's license. However, his signature characteristics would be similar enough on each license application to verify his guilt; with some additional evidence, a prosecution could be made.

King notes that since most document infractions are premeditated, "violators do a good job when they cheat. Every case is an individual situation, and you keep learning new things and researching all the time."

After talking with Sergeant King, we moved on to Lieutenant Sagans' office. Sagans is a 22-year veteran of the State Police. Before beginning his law enforcement career, he earned a degree in chemistry from the University of Pittsburgh. He was head of the crime lab's chemistry section before taking over as director in 1971.

Noting the rise in crime in recent years, Sagans says, "We're always trying to modernize and update our equipment and techniques. We'd also like to add more personnel, as our caseload is constantly increasing. That's partly why we began to regionalize our system in 1969. Regional labs facilitate the examination of evidence by putting crime labs close to local law enforcement agencies. Some regional labs do as much work as the central lab here in Harrisburg.

"We've received very enthusiastic cooperation from the Game Commission. They've provided us with blood serums and hair samples from many kinds of animals, and their officers are always well prepared when they come in to have evidence examined."

Earl Geesaman, chief of the Game Commission's Law Enforcement Division, is quite familiar with the crime lab's contribution to enforcement of Pennsylvania's wildlife laws. "When I was a game protector in York County in the early '50s, I needed supporting evidence on a deer case," Geesaman reminisces. "The State Police performed ballistics tests that identified the rifle involved and led to the conviction of a violator.

"We've had support from State Police criminologists for at least 25 years," Geesaman says. "I've noticed a marked increase in our use of the lab in the last 10 years, though. In the future, the Game Commission will take advantage of all known scientific developments to apprehend violators."

Today's violators use airplane landing lights, silencers, crossbows, two-way radios, and snowmobiles to make poaching easier. In response, the Game Commission is updating all facets of its law enforcement program. Modernized communications, the use of metal detectors to find bullets, and support from the crime lab are but a few of the law enforcement advances the Commission has made. With these techniques in use, it's a good bet that the future will see more and more Game Law violators feeling the pinch from that long arm of the law.

TURKEY – ON MY OWN!

By Nick Sisley

TURKEY SEASON had opened on Saturday, but because of previous commitments I was not able to get to northcentral Pennsylvania—Susquenita Country—until Monday evening. Leroy Good of Westport, in Clinton County, with whom I was to hunt, was under the weather with a throat virus when I arrived, but was optimistic about the following morning. I had gotten in touch with him through the Susquenita Tourist Council and we had corresponded at considerable length beforehand. When we met in person it was like seeing an old friend. That evening, before turning in, he got out his array of calls and demonstrated his ability. It was obvious that Leroy was an expert.

The next morning Leroy felt even worse but, undaunted, he bundled up in extra clothing and we piled our gear into his pickup and started up over the mountain that borders the south bank of the West Branch of the Susquehanna River, a few miles west of Westport. It looked like a frustrating day—cool and rainy, with Leroy feeling worse as each hour slowly ticked away. The sum total of what we saw and heard was a 6-point buck. No turkeys, not even a sound.

By the time we returned after dark, it was obvious that Leroy wasn't going to be able to hunt the next day. However, several phone calls later he had me all lined up with Charlie Cross, of Hammersley Fork. Mr. Cross owns an excellent, remote turkey area, and I was to meet him the following morning.

I am not an adept turkey caller, but without Leroy I would have to entice a bird in myself. For over an hour Leroy schooled me with my Lynch box call, and though I made significant improvement in that short time, I never came close to making the natural sounds that Leroy could. He instructed me to use the call sporadically and not overdo it. I turned in for some sleep and was soon dreaming about gobblers with 10-inch beards.

At daybreak the next morning, I met Mr. Cross above the Alvin Bush Dam on Kettle Creek. I transferred all my turkey hunting gear into Mr. Cross's four-wheel-drive pickup. He locked in the hubs, and we started up over the mountain. The trail—it certainly wasn't a road—was a rough one. We bounced and jolted slowly toward the top, then eased down over the other side. It must have taken us 45 minutes to reach the drop-off point. Here Mr. Cross took time to point out areas that turkeys had utilized in the past, where some might be roosting overnight, and where I could select my calling spot. Though I had brought along a 12-gauge Parker double barrel, he insisted that I use his Remington M760 pump. It was one of the relatively rare ones, in 222 Remington caliber—no longer available.

It was full daylight now, and though I wanted to select my stand quickly, I knew that I had to take my time and move silently. I eased farther down the slope, flushing a woodcock at a spring seep.

A couple hundred yards from the drop-off point, I came to a large old grassy field. Nut-producing oaks and hickories grew on three sides. A creek bed was situated at the far side of

the field with an evergreen stand that looked like an excellent roosting spot just across the stream. I carefully extracted the box call from my pocket, set it alongside the oak, spread my small piece of sheepskin fur side up against the tree, and settled back into a comfortable position. I wanted everything to be quiet for some time before I stroked the call.

It was a peaceful morning with little or no wind, and though lightly dressed I was not cold. Turkey or no turkey, I said to myself, this was going to be a grand day to be in the big woods.

Susquenita Country, that huge northcentral Pennsylvania parcel, is one of the true wild turkey hotbeds in the entire country. The bird populations there are healthy and well, and apparently on the increase.



WITH HIS BACK against a tree to break up his outline, Sisley watches alertly for any sign of a turkey. Rifle is a M760 Remington 222 with 4x Weaver—ideal for these big birds.

I knew I was in an excellent area and was optimistic about my chances for success. During the previous two days there had been very heavy rains. Though it was overcast and threatening, it was apparent that wildlife had been holed up and now the animals were hungry. The songbirds were vocal and flitting back and forth everywhere. I suspected that all the turkeys' crops were empty that morning, too.

Clucking Sound

When young turkeys get separated from the rest of the flock, they make a clucking sound which evidently means something like, "Hey, Mom, I'm lost. Where are you?" The typical way to call a turkey in the fall is by utilizing the hen yelp. It goes something like this in print: *"Yeeeeeelp. Yelp. Yelp. Yelp. Yeeelp."*

I heard a few clucks that morning, or at least that's what I thought they were. Though barely audible, the sound seemed to come from the creek valley across the open field—where the evergreen stand was located.

Not once, but twice, I thought I heard clucks during that first half-hour wait, but I held off answering for a full 30 minutes. Then I picked up my cedar box call and prepared to stroke the side. Worried that the chalked lid striking the side of the box would produce a screeching sound that would warn and frighten every turkey for miles around, I got ready to call.

Actually, my attempt came out pretty well. There was nothing to do now but wait. Carefully, I placed a paper napkin under the lid of the box so that it couldn't accidentally make a sound when I laid it down or picked it up the next time. I cradled the 222, checked my watch, and took up the wait again.

If anything, the songbirds became more active. Two hundred yards off, toward the far end of the field, a white-tailed doe strolled into the open and looked around her domain, making sure it was safe before she saun-

tered on across and disappeared into the woods beyond. Then I thought I heard clucks once more. It was another long 30 minutes, because I had to keep telling myself not to use the call. An expert who seldom sends out anything but enticing turkey talk could undoubtedly get away with calling at more frequent intervals. But I knew that too much calling on my part would result in sour notes that might turn turkeys away.

Finally, I slowly picked up the box again, carefully removed the napkin, and made the same call that I had sent out a half hour previously. That accomplished, I laid the box down and waited silently. That was luck, I thought. That call came out a lot better than any of my practice efforts last night.

There was no answer, though I listened intently, never moving. After awhile, I picked up the rifle that had been cradled across my lap, gripped the fore-end securely, wrapped my right hand around the grip, and found the unfamiliar safety. I wanted to be certain where it was. I remembered Mr. Cross had told me the rifle was sighted dead on at 50 yards with the Weaver K4 scope.

Long minutes ticked away. I was more content now to drink in and enjoy the beautiful surrounding mountains, less inclined to dwell on the time between calls. I had been looking to the right, and as I slowly swiveled my head back the other way, there was a young turkey within 30 yards. How he had managed to get in so close before I saw him was difficult to understand. It seemed he had materialized right out of the ground.

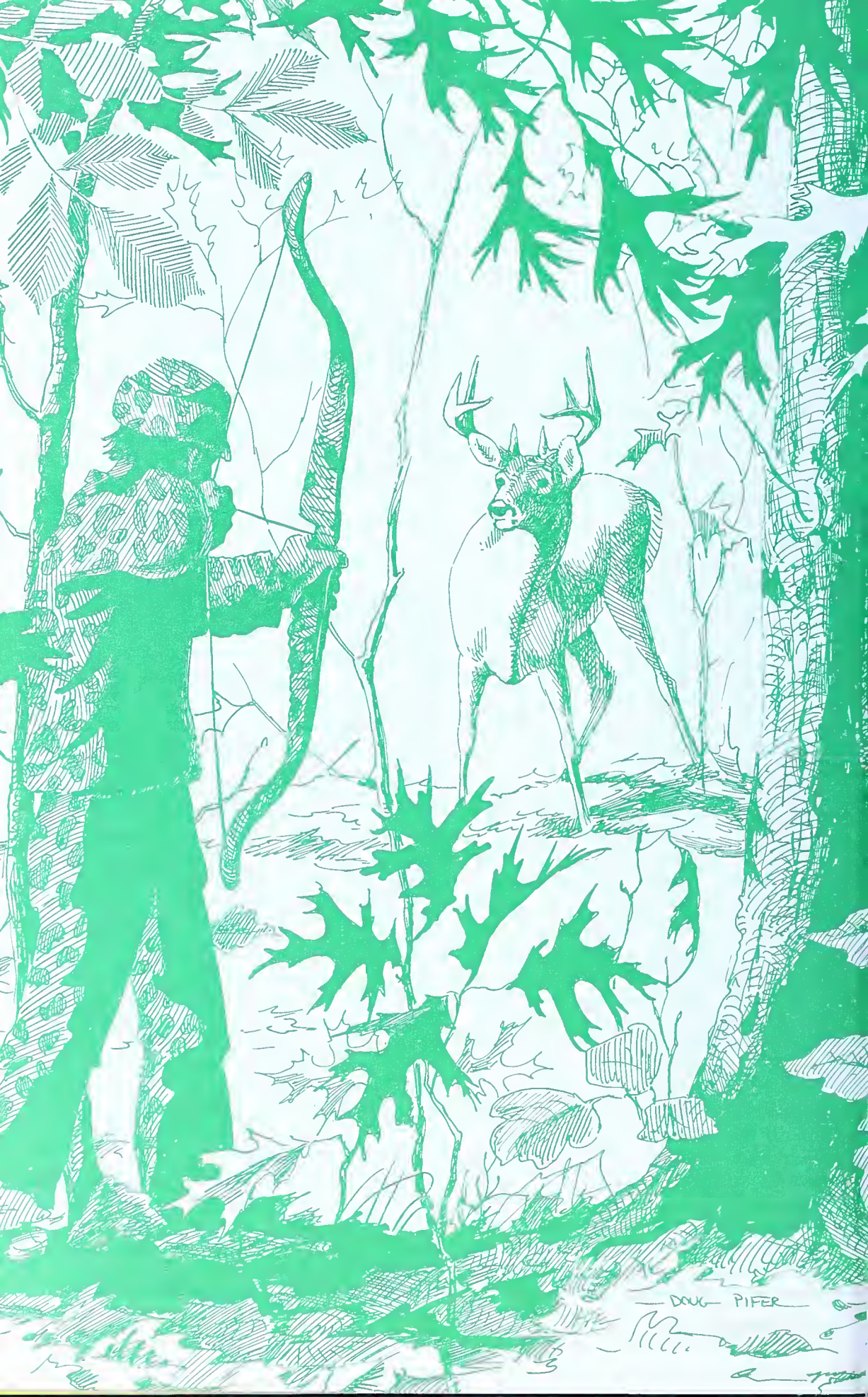
The bird was feeding and totally unaware of my presence. I didn't stop to consider why this turkey, which had obviously been born the previous spring, had wandered away from his flock. My mind was totally concentrated on bringing the Remington pump up slowly. I moved only when the bird had its head down feeding. I put the Weaver's small dot reticle on the chest. Just then the bird snapped its head high to attention, holding perfectly still at a range of about 30 yards.



THOUGH NOT THE biggest turkey he ever killed, Sisley is particularly proud of this one because he called it in himself and made an instantaneous kill.

No sense wasting any meat, I thought. I raised the reticle to the base of the turkey's neck, squeezed the trigger, and ran joyfully to retrieve my flopping prize. Only then did I begin to wonder where the rest of the brood was, and as I approached my bird, an entire flock of 20 or more wild turkeys took flight in a flurry of wings—heading back for the evergreen stand where they had obviously spent the previous night. From my sitting position, there was no way I could have seen them, as they were in a depression behind the slight rise where I had shot my turkey.

Why had this single bird wandered ahead of the flock by 40 or 50 yards? Turkeys don't normally do that. If an entire flock has been enticed, they usually come to the call en masse. Perhaps it was survival of the fittest, and my bird was taken because he didn't conform to the "law of the pack." Or perhaps he was a sentinel sent ahead to scout the territory and look for the lost bird that was calling at the far end of the field. I don't know. I guess it doesn't matter now. The important thing was, I had my turkey. And I'd got it on my own.


DOUG PIFER

A BUCK FOR DIMITRI

By Charley Zaimes

I COULD HEAR the deer coming up the slope. It was moving slowly, with long pauses. Behind the green curtain of foliage that separated us, I tried to visualize the splendid animal as it stopped to nuzzle the fallen leaves in search of acorns.

I was seated at the base of a huge oak, one of many on the south slope of Stoney Mountain at the western end of Game Lands 211 where my older son, Dimitri, and I had decided to hunt on this second Saturday of the archery deer season. During an advance scouting visit two weeks earlier, I had found a spot that offered concealment and at the same time gave me a clear view of a well-worn deer trail that angled up from the valley to the ridgetop. On opening day I had seen no less than seven doe deer move up that trail single file at a slow walk. I let them pass unmolested because Dimitri and I had agreed we'd settle for nothing less than a big-rack buck.

Dimitri makes himself even more invisible than I do. Using burnt cork and commercial camouflage sticks, he paints his face and hands so that the finished product looks like a cross between an Indian on the warpath and a straight man in a minstrel show. I laugh, but am forced to admit that he blends right in with the leaves and branches and is virtually invisible at fairly close range.

I heard the deer again. Just tiny crisp-leaf noises. By now the adrenalin was flowing fast and my heart was pounding hard. An approaching deer will do this to me every time, even though it's been happening every fall for 40 years.

It was just light enough to see and I knew the legal hunting hours for that day were less than five minutes old because I had put my watch alongside my feet so I could check the time by merely lowering my eyes. I strongly believe in a minimum of movement when on deer stand.

The morning was cool and dry. The fallen leaves were crisp and I could hear them plainly as the deer foraged through them to find acorns. It's an unmistakable sound.

I strained my eyes, trying to make out the form of the deer, but had no luck.

When I next heard leaves rustling the sound came from directly off to my left. The deer had reached my level on the slope. I realized this deer was avoiding the well-worn path and began to suspect it might be a very wise and very cautious buck. The kind that lives long enough to grow nice antlers.

Well, if he continued on his present course, he should top the ridge about 30 feet from the stand Dimitri had previously selected. It was about a hundred yards above me and slightly east of my position, smack in the middle of five beeches growing from a single root. The beech trunks were each about eight inches in diameter and, collectively, provided my son with a good natural screen. The place had just one drawback. There wasn't much room to maneuver in.

For the next 20 minutes I continued to hear the deer feeding his way uphill. Then he faded from earshot.



Another quarter-hour went by. All of a sudden I heard a loud crashing noise and knew the deer had taken flight.

Had Dimitri spooked him? Perhaps another hunter, stalking the ridgetop, had startled the deer. Whatever the cause, it was obvious from the sounds that the deer had suddenly bounded into the brush headlong. Hoofbeats and crackling branches furnished a clear picture of the flight.

I decided to sit tight. If the deer had dropped off the ridge on my side of the slope it was just possible he might circle back to where I was hidden.

A half-hour passed before I heard something coming my way. It was Dimitri. Even through the war paint I could see the flush of excitement on his face. In his hand he held a broken arrow.

As I watched him coming toward the blind, my mind flashed back through the years that had passed since I first took him along into the woods. When he was only five, we used to play a little game. He'd stand still while I walked about 50 yards ahead of him. Then he would try to sneak up behind me while I waited. If I could hear him coming, he lost that round. If he reached me without my hearing him, he was the winner.

He soon learned to watch where he placed his feet, avoiding twigs and branches. He learned to find footing on solid rocks or soft moss. In short, he soon became an expert stalker. Over the years, he acquired many other woodsman traits, some of which stood him in good stead during his service in the Marines in Vietnam.



AS A YOUNGSTER, Dimitri "stalked" his father. He soon learned where to place his feet, avoiding twigs and branches and finding footing on solid rocks or soft moss.

Biggest Buck in the Woods

I saw him as a small boy, straining to draw the string on a 20-pound target bow, and later with a full-weight hunting model. It was hard to believe the time had passed so fast. I was just thinking of our first hunt together when he crawled into the blind and grinned. "Dad, I think I've just killed the biggest buck I ever saw in the woods."

"What do you mean, you *think* you got him? Don't you know?"

"Well, I got him right in the middle of the left shoulder. You should see the rack on him. He's an 8-pointer with big tines, and you should see the base of the rack. It's really thick and the color is very dark, like tobacco. Oh, he's a real beauty."

I still wanted to know why he wasn't sure of the kill.

"When I hit him, he went down on his knees, then he made a long jump and crashed through the brush along the edge of the ridge. When I last saw him he was making a long jump over the edge and out of sight. I know he was well hit, so I'm sure we'll find him dead not far from where he disappeared. But you always told me not to chase a wounded deer too soon, so I thought I'd come down and get you. We can trail him together, can't we?"

I readily agreed, and we walked up to the ridge.

We didn't have to trail very far. Just 45 paces from where the deer had been hit, we found him piled up

against a stump. It was a good clean kill.

Returning to the ridge, we paced off the shot. It was just 15 long steps —about 45 feet—from the beech stand to where the deer had been hit.

"I think I stopped breathing when I saw that big buck come over the edge," Dimitri said. "He was looking my way and I didn't dare make a move. After awhile he began feeding. Whenever he put his head down, I changed my position just a bit. It took nearly 10 minutes for me to get into a position where I could draw my bow. I was really sweating it out. But it was worth waiting for."

I couldn't very well argue with that conclusion.

We went back to the buck and I relaxed while Dimitri filled out his tag. The drag downhill to the station wagon was easy.

The hunt was over. There have been others since then and, the Red Gods willing, there'll be more to come. But for Dimitri and me, that one will never be forgotten.

EDITORIAL . . .

(Continued from page 1)

another attempt to smooth the way for gun registration and confiscation. (In recent years, the sport hunter has been the primary defender of private gun ownership; by debasing him in the eyes of the voters, a great advance toward confiscation could be made.) Perhaps they thought they were presenting a completely accurate picture. (Anyone who believes that typical TV programming is worthy of the American public could believe anything.) Perhaps . . . Oh, well, you get the idea. There are many possibilities. In line with the last one mentioned, we might say that several non-hunting friends told us they found "Guns of Autumn" so obviously slanted they turned it off before the midway point. That could be the most interesting comment of all.

The whole situation could get worse before it gets better. As this is written, "Echoes of the Guns of Autumn" is scheduled for airing. Chances are that, either blatantly or subtly, it will be more of the same thing.

A number of persons have asked why the Game Commission permitted CBS to film the Pymatuning sequence. When requesting permission and cooperation with this, CBS said they intended to produce a "poor man's American Sportsman," that "Guns of Autumn" was to be based on the heritage of hunting and was to be in good taste and not anti-hunting. You've seen the result.

There have been rumors that the Federal Communications Commission might investigate the production and objectives of "Guns of Autumn," but CBS apparently finessed this by scheduling a follow-up show entitled "Echoes of the Guns of Autumn." We can well imagine what this will be—a series of interviews with selected persons expressing the responses CBS desires to the first show, with perhaps a few sportsmen being ridiculed in carefully edited scenes. What might seem an objective report to a casual viewer will doubtless be another well-staged cheap shot at American hunters. If it is, and you and I want to have any effect on the long-range outcome, we must express our opinions by writing to the FCC Complaint Division, 1919 M St. NW, Washington, D.C. 20554. It isn't enough that we complained to CBS or the FCC about the first show. If we don't express our feelings on the follow-up, the network will claim that "Echoes . . ." gave sportsmen equal time to respond to the "Guns of Autumn." And that's a lot of bull. *—Bob Bell*

Handgunning Bushytails

By Ed Shenk

THE BIG gray bushytail paused momentarily in his erratic travels in search of acorns. The sights of my 22, which had been following his path, lined up momentarily. I squeezed the trigger and watched with satisfaction as the gray tumbled, twitched once and lay still. I paced off thirty steps and proudly help up my prize. "A perfect head shot," I murmured happily.

"What's so great about a shot like that with a 22?" you ask. Nothing, really, except that my 22 was a single-shot handgun, not a rifle.

I had always enjoyed an occasional squirrel hunt with the 22 rifle, but I love grouse hunting even more. As luck would have it, when I took my rifle out for squirrels, I would generally flush plenty of grouse. When I hunt grouse I see many squirrels, but I prefer not to shoot them with a shotgun. Carrying both handgun and shotgun, however, allows both grouse and squirrel hunting. I've gotten to the point now where I really don't enjoy squirrel hunting with a rifle. To me, there is much more satisfaction in dropping one with the handgun, even though I miss more than I used to with the long gun. But now, I don't have to collect a limit to have a satisfying trip.

Perhaps the prime difficulty of handgun hunting is the unsteadiness of aiming. A lot of target practice will reduce this shakiness. In the hand of an experienced shot, or for very close range shooting, a single-hand hold will put meat in the pot (or squirrel tails on the fly-tying bench). More often than not, though, I use the two-hand hold by gripping my right wrist (gun hand) with my left hand. This increases steadiness immensely, and most of my close shots are taken while using this two-handed grip.

Other Little Tricks

There are other little tricks which I use for added steadiness on long or difficult shots. Quite often during late November, I scout for deer along the high mountain ridges and benches. Most of my favorite areas for this pleasure have a decided scarcity of grouse but a fair number of squirrels. Many times I had carried the grouse gun only to pass up scads of easy shots on the big gray bushytails. Now I leave the scattergun at home, strap on my favorite single-shot handgun, but add another tool to my outfit. This "tool" is a slendor hickory walking stick about five feet long. The stick not only aids in walking but also is used for extra support while shooting my sidearm.

I sometimes clamp the end of the stick under my right arm, and rest my gun hand on my left hand, which grips the walking stick at arm's length. This is a very steady hold; it feels almost like having a shoulder stock on the pistol. Incidentally, a shoulder stock is illegal

on a pistol or revolver, but the walking stick gimmick is perfectly legal.

When sitting or kneeling, I hold the stick upright with my left hand, resting my right hand on my left. This is also a very steady hold. Another trick is to rest the outstretched hands (two-hand hold) against the trunk of a tree. Never rest the gun barrel on or against a hard object, or you will ruin the accuracy of your shot. This, of course, is true with a rifle as well as a pistol.

Squirrels have the sneaky habit of sliding around the side of a tree away from the hunter. What should you do? Circle the tree? This doesn't work too often, because the squirrel will also slide around the tree. Try the time-proven trick of tossing something to the other side of the tree; throw a stone, your hat, or anything else that will make a noise. The squirrel will then zip around to your side, and, with luck and a quick shot, he will be added to the game bag.

Hand calls work on occasion also, but that's getting a little too serious for a fun game, which handgunning is supposed to be. The calls will work, though, especially for the squirrel which absolutely refuses to show himself. A few squawks on the call usually persuade even the most cautious squirrel to peep around a tree to see what's going on.

My favorite little handgun for bushytails is a Stevens tip-up single shot with a heavy, 8-inch barrel.



SHENK USES HIS walking stick as an aid to close holding with the little Stevens single-shot 22 he prefers for handgunning bushytails.

Mine is old but still very accurate.

Suit your own fancy on whether to use a single-shot pistol like mine or one of the many revolvers in 22 rimfire. One word of caution, though; semi-automatic (autoloading) handguns are illegal for hunting in Pennsylvania.

In addition to a current hunting license, a permit to hunt with a handgun is required. These are available for 50 cents at the County Treasurer's Office; be sure to have the make, caliber and serial number of the gun as well as your hunting license number, when you apply for a firearms permit.

If you have tired of squirrel hunting with rifle or shotgun, you might try handgunning. Once you try it, you may never go back to the long guns.

Super Slurper

A camel can drink 25 gallons of water in half an hour.







November Da

NOVEMBER is one of the sportsman's favorite months, with pheasants, ducks . . .





GEORGE AMMERMAN, o
with his 477-lb. Wayne C









Afield



. . . geese, bears, cottontails, grouse, quail and other game species in the field.

BILL BAER, Marysville, bagged this 370-lb. blackie in Clinton County.





ville, and friends
ear.





FIELD NOTES

Sweet Tooth

TRAINING SCHOOL — Recently, I saw a squirrel in my front yard, and in its mouth was what appeared to be a white stick. Upon closer investigation I was surprised to see that in reality it was a discarded cherry lollipop. After several minutes of switching ends in its mouth, the squirrel finally buried his prize in the yard. —Trainee B. J. Seth.



In the Nick of Time

CENTRE COUNTY — I had to remove a black bear from one of the state parks in my district. The bear started out by dumping garbage cans and getting into other assorted mischief, then tearing up ice chests and taking food out of people's hands. I got the call to remove the bear after the superintendent learned that one of the campers had spread peanut butter all over his hand and then allowed the bear to lick it off!—District Game Protector G. F. Mock, Coburn.

Rabbit . . . Groundhog . . . Hamster Damage

TRAINING SCHOOL — While working as a deputy in Westmoreland County, an elderly gentleman called me with a complaint. A varmint had been eating plants in his garden and he had finally seen it. "It's either a groundhog or a large hamster," he said. After setting a live trap, I finally caught the varmint which turned out to be—you guessed it—a rabbit.—Trainee J. G. Sickenberger.

Local Bear Situation

MONROE COUNTY—Considering the large number of bears that has been reported to me, in addition to the ones that I've personally seen, the number of bear damage complaints has been quite low. If people would keep their trash inside until it is to be picked up, we would have even less trouble. All in all, it should be a good season on bear in Monroe County again this year.—District Game Protector D. C. Beach, Cresco.

Couldn't Have Been Subscribers

BLAIR COUNTY — In the September GAME NEWS I had a field note concerning littering on State Game Lands in Blair County, and I said that if it didn't cease the roads might be closed. Just a week after the magazine came out, someone emptied a truck load of roofing and many more beer cans showed up. Well, hiking never hurt anyone.—District Game Protector D. D. Martin, Hollidaysburg.

Ol' Buddies

ADAMS COUNTY — Deputy Paul Warnick, of New Oxford, reported seeing a doe with two fawns in the vicinity of Bethlehem Mines. While observing the deer, he noted a disturbance in the bushes nearby. Expecting to see another fawn, he was somewhat surprised when two red fox pups appeared. The young foxes and the two fawns began to romp and play together like old friends. After several minutes the foxes disappeared, leaving a somewhat perplexed deputy, but they returned a short time later for another friendly go-around.—District Game Protector J. J. Troutman, New Oxford.

Now That's a Blacksnake!

MERCER COUNTY — While manning the exhibit at the Stoneboro Fair, I talked to a fellow who reported a 15-ft. blacksnake in his backyard. It was so thick it wouldn't fit through a four-inch knothole, and it would raise itself up level with your eyes and stare back at you.—District Game Protector L. P. Heade, Mercer.

Bull-Headed Collision

While posting a farm-game project with Safety Zone signs, Food and Cover Corps members in Northampton County had an exciting experience. After consulting with the landowner the crew decided to take a farm road through a meadow to erect the signs. The farmer's bull had other ideas. He ran full tilt for the truck, hitting just behind the cab. The men felt that discretion would be the better part of valor and beat a hasty retreat to survey the damage: a couple dents and scratches from the bull's head.—Land Manager J. R. Fagan.



Special Duty

MERCER COUNTY — As Game Protectors, we have occasion to perform a great variety of services to the general public. Many of these services come from the depth of the public's own mind and not from the game law or Game Commission regulations. One example is a Greenville woman who said that when she was pregnant and her husband went off hunting, he would tell her that if she needed anything to call Game Protector Ray. He assured his wife that I would go and get him. However, he always neglected to tell her where he was going hunting. Now I know why the Game Commission teaches "How to Deliver a Baby" as part of our training—District Game Protector B. K. Ray, Greenville.

Caught In the Act

CLARION COUNTY — This month I arrested a woodchuck hunter for resting his rifle over the roof of his car to shoot. The hunter shot once before seeing me, looked up at me and then fired again. When I asked him why he fired the second shot, he replied, "I knew you had me and the chuck was getting away."—District Game Protector J. G. Bowers, Knox.



Hitch-Hiking Dangerous

GREENE COUNTY — This month Deputy Andy Ewart and I were called to the Deep Valley Area to remove a family of beavers—two adults and a young one. We set two live-traps near the lodge and baited them with corn. When we checked the first trap the following morning we found a large male; when we moved to the second trap, our problems were solved. Both the mother and the young beaver were in the trap. It seems that the young one hitched a ride on its mother's back, and when the trap was set off both were caught.—District Game Protector R. W. Oliver, Greensboro.

Jailbreak

McKEAN COUNTY — A Gifford resident called and told me that he had eaught a raccoon in his garden, had it in a cage and wanted me to pick it up. When a deputy went to the resident's home, the nian claimcd that another raccoon had come over to the cage and released the latch, and then both raccoons went running into the woods.—District Gamc Protector D. A. McDowell, Smethport.



Huntin' First-Matrimony Second

MONTGOMERY COUNTY — Usually requests for information regarding the opening dates of hunting seasons indicate vacations planncd well in advance. However, a young lady recently called to double check the opening date of the general small game season. She explained that her father and uncles were avid hunters, and she did not want to cause any problems by choosing the wrong date for her wedding. I don't know if that's male chauvinism or female understanding; maybe I should have asked if she is a hunter, too.—District Game Protector B. J. Schmader, Collegeville.

The Big Game

TRAINING SCHOOL — Game protectors and uniformed Game Commission personnel are often mistaken for being anything from the dog catcher to the meter reader. Recently, one of the visiting instructors at the school said two young ladies asked him if he was in charge of the Pennsylvania Lottery. It seems they thought the word "Game" in the Game Commission referred to a different type of game.—Trainee D. E. Marks.



Must've Been Real Hungry

TRAINING SCHOOL — An Indiana County farmer told me he found a black rat snake in his henhouse. Noticing a lump just behind the snake's head, he squeezed the snake behind the lump and out came one of the farmer's porcelain nest eggs.—Trainee C. E. Shrump.

Parting Shot

LACKAWANNA COUNTY — After arresting a man for littering, I had an interesting discussion with him and his friends. Some excuses they gave were: the place was already littered, there were no signs prohibiting littering, there were no trash receptacles available. I pointed out that the land was privately owned, and the landowners shouldn't have to pay for trash removal or receptacles, and if littering continued, he might not allow anyone else to use his property. Well, they finally saw my viewpoint but as they left one said, "If no one littered, you wouldn't have any work to do and therefore would be out of a job."—District Game Protector C. P. Cinamella, Moscow.

Southern Visitor

ERIE COUNTY — While taking a Sunday afternoon ride on Presque Isle, my wife and I were treated to a rare sight. We saw a large white bird wading in a marshy place and thought we'd spotted an egret. Closer examination, however, revealed that we were looking at a great white heron which, according to "Peterson's Bird Guide," is very rare north of Miami and in 1935 numbered only 150 in the entire United States. This is the largest of the herons, and it can be identified by the yellow-green legs (the egret has black legs). Rigid protection has increased its numbers to a more normal status.—District Game Protector R. W. Meyer, Fairview.

Brother Tells All

BRADFORD COUNTY — During our recent in-service training program at State College, I learned many interesting things. The most humorous was a story about a former Luzerne County game protector, now CIA in the Commission's Southcentral Division. We'll call him "Wes." Apparently he was attempting to trap a nuisance bear. A big crowd was on hand, and they saw the bear enter the culvert trap, steal the bait and make a hasty exit. This brought a round of applause from the crowd. Our CIA decided to investigate why the trap did not go off; while inside, he bumped the trigger and the big iron door slammed down and trapped him. More rousing applause was heard from the crowd. The moral to this story is simple—blood isn't thicker than water; some game protectors will write anything to get a field note in the GAME NEWS. Sorry, brother Wes!—District Game Protector W. A. Bower, Troy.

Long Distance DGP

BUTLER COUNTY – Recently my phone rang, and a young man asked if we had any hunter education courses set up. I replied "Yes," and asked where he lived. He replied Bucks County (the opposite end of the state). Of course I told him that we had no schedule of courses for his area, but I was curious as to how he got my name since I live so far away. He explained that he had looked in his Digest of Hunting and Trapping Regulations under game protectors for Bucks County and was unable to reach either by telephone—so he went on to the next listing, Butler County, and called me. Here's hoping anyone going to that much trouble to take a hunter education course passes it with 100%.—District Game Protector W. N. Weston, Boyers.



The Last Chuckle

TRAINING SCHOOL—A few days ago two trainees saw a woodchuck stand on its hind legs, reach up with both front paws and pull down the last ear of sweet corn from a small patch intended for the school's use. One trainee swears he heard that woodchuck chuckle.—Trainee W. Wasserman.

Woods Sensitivity Training

TRAINING SCHOOL – Recently, each student at the Training School was left alone in a wooded area and asked certain questions concerning his surroundings—specific questions aimed at making him aware of just how much there is to feel, see, smell, and hear in the forest. If you've never done this before, try it. Look around, notice those things you take for granted, both great and small. Go from decaying vegetation to seedlings and finally to the great oaks; the whole cycle of life can be observed in one spot.—Trainee R. D. Hixson.

It's Obvious

MONTGOMERY COUNTY – Deputy Paul Vargo recently took a short vacation along the coast in Maryland. Dressed in civilian clothes and with binoculars in hand, he was walking along a bridge where some fellows were fishing. One of them asked, "Are you a game warden?" When Deputy Vargo explained that he was—but not for the state of Maryland—the man replied, "I knew you were, just by the way you looked."—District Game Protector B. J. Schmader, Collegeville.

Evaluation—Prediction

FOREST COUNTY – The mast crop, especially acorns, was very poor in this area of Forest County last season and its importance showed up this spring. I found many more deer that had starved to death this past spring than I have ever found in the four years I've been in this district. I wonder how many more would have been lost if the antlerless season had not been extended in the northwest and northcentral divisions last year. Fortunately, the mast crop looks very good this year.—District Game Protector E. L. Taylor, Tionesta.

CONSERVATION NEWS

By Ted Godshall



Kenneth L. Hess



James D. Mort

Hess Named Administration Chief

KENNETH L. HESS, personnel officer for the past nine years, has been named chief of the Game Commission's Division of Administration, succeeding the retired Daniel H. Fackler, who had served in the position since 1966.

The Division of Administration is responsible for the purchasing, data processing, personnel, accounting and licensing functions of the Game Commission.

Hess, 37, a native of Hanover, is a former science teacher in the York City school district. He holds a bachelor of science degree from Millersville State College and did graduate study at Penn State.

The new administration chief was a member of the eleventh class graduated from the Ross Leffler School of Conservation, the Game Commission's training school, and served as a district game protector in Lehigh County before being named to the personnel position in Harrisburg.

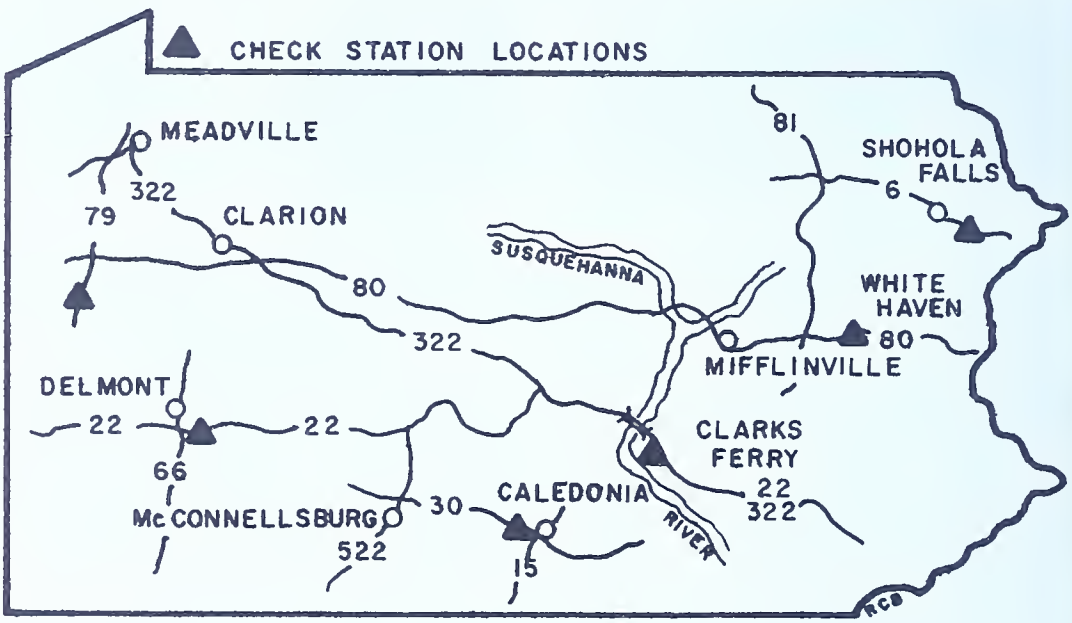
Succeeding Hess as personnel officer is James D. Mort, a native of Riddlesburg, Bedford County. Mort, 36, was a member of the twelfth class graduated from the Game Commission's training school nine years ago. He served as a district game protector in Franklin County before being promoted in 1972 to administrative assistant, later administrative officer, in the personnel office in Harrisburg. Sandra K. Boyer of Harrisburg has been named administrative assistant to succeed Mort.

Six Deer Check Stations

AGAIN THIS YEAR, Game Commission personnel will operate six deer check stations in Pennsylvania, according to Dale E. Sheffer, Chief of the Division of Game Management.

A large amount of information which is invaluable to the deer management program is collected at these stations. Therefore, it is hoped that every successful buck hunter who can arrange to stop at one of these stations will do so. The condition of the herd in different regions of the state, the condition of the range, the age structure of the herd and other information are revealed through the biologists' examination of deer at these stations. This data helps the Commission set seasons to provide the most sport for the greatest number of hunters each year. The check stations will be in operation December 1 through December 3 at the locations shown on the map below.

The Northwest Station will be at the rest area of the southbound lane of I-79 just as you enter Lawrence County, and the Northeast Station at the rest area off of the eastbound lane of I-80 near White Haven. The Southwest Station will be located near Delmont along Rt. 22 east of its intersection with Rt. 66; the South-central Station along Rt. 30 at Caledonia Park in Adams County; the Southeast Station north of Harrisburg on Rts. 22 & 322 near the east end of the Clarks Ferry Bridge; and the Northeast Station in the Shohola Falls recreation area parking lot along Rt. 6.



Bert Benson, Ex-Game Protector, Dies at 108

B. A. "Bert" Benson, RD 4, Lewistown, died August 30 at a convalescent home in Thompsontown, where he had been a guest for some years. He was 108 years old. Benson was appointed a game protector in 1920 and worked in this capacity for the Game Commission for 16 years, until he was forced to retire due to age. A high point in his career was the breaking up of the largest illegal deer killing ring ever uncovered in Huntingdon County.



CAROL COOK, a wildlife student at Penn State's DuBois campus, checks bear taken in Centre County by Allen Moore, of Alexandria.

Bear Data Needed

THE NEED FOR information on Pennsylvania's bears continues. In order to aid this investigation, it is legally required that all bears taken by Pennsylvania hunters be examined by a game officer within 24 hours of killing. The officer will attach a metal tag which must not be removed from the animal until the trophy is mounted or tanned. Data collected from these examinations is invaluable in the proper management of the bear population.

Bear check stations will be established at the six field division offices listed on the inside back cover of GAME NEWS and also at satellite check stations scattered throughout the bear range. Newspapers and other news media will carry the exact locations of these stations before the 1975 bear season, and Game Commission officers will be able to direct hunters to the nearest one. The division offices will have scales to weigh each bear but the satellite stations will not, so successful hunters are urged to stop at the division offices in order that this important information can be recorded.

Besides weight, the Commission also urgently needs data on age, sex, markings (if any), date of kill, and miscellaneous information such as scars, behavior, whether alone or with other bears when taken, features of habitat, etc. Wherever possible, the Y-shaped reproductive tract and ovaries of females and the testes of males should be preserved. If desired, successful hunters may deliver their bears to the check stations before field-dressing them. Game Commission personnel will attend to this chore, making certain to retain the necessary organs for examination.

This information will provide clues to our bears' range, habitat preferences, dispersion, population, tendencies to move to sources of food supplies, etc., as well as helping to determine the age structure, size and condition of the bear population. The ultimate result of this study will be better management of this valuable resource.

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The Questionnaire

IN AN ATTEMPT to learn more about GAME NEWS readers' likes and dislikes, and to gain information which would be useful to our wildlife biologists, we ran a questionnaire in the February issue. A total of 8410 responses came in. This is about 4 percent of our circulation and is considered a good response for such an endeavor. We want to thank everyone who cooperated.

We have had many queries as to results. For your interest and information the responses, as assembled by Hank McCawley and his Data Processing Section, are listed on the following page. We could not get the results to you sooner as the data processing staff and equipment were busy with other PGC work.

Among other things, the results show that approximately three-fourths of our readers are male, one fourth female, and that each copy of the magazine is read by 2.33 persons (excluding "large groups" such as copies that go to doctors' waiting rooms, sportsmen's clubs, school libraries, etc.). This indicates a total readership of about one-half million.

For better understanding of the answers, we point out:

(1) "N.R." indicates "no response" (Questions 2, 4 and 13);

(2) Question 6 was intended to elicit a response from the subscriber only. However, the answers given showed how many persons in the family hunted or trapped, so the total in the case of "hunting" is higher than the number of individual replies. This is reflected in the replies to Question 7, which show that, on average, 1.66 persons in each replying household hunt, while about one person out of every four responding families traps.

(3) Answers to Questions 10 and 11 were determined by dividing the average family totals by the average number of persons in each family who hunt. Projected to reflect the totals of all who hunt in Pennsylvania, these indicate that hunting in this state provides some 22 million man days of recreation each year, with some $170 million, not counting $11 million-plus in license fees, injected directly into the economy as a result.

GAME NEWS

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Questionnaire Responses

1. NUMBER, AGES AND SEX OF PERSONS WHO READ THIS COPY OF GAME NEWS

Under 12		12 - 16		17 - 40		41 - 65		Over 65	
1050 M	534 F	1755 M	542 F	6787 M	2515 F	3921 M	1390 F	879 M	239 F

2. DO YOU LIVE IN PENNSYLVANIA? (Replies by families) Yes 7040 No 1206 N.R. 164

Rural area 3022 Small town 2296 Suburb 1741 City 901 N.R. 450

3. DO YOU REGULARLY READ THE FOLLOWING GAME NEWS FEATURES?

	Yes	No		Yes	No
Editorial	8026	384	Susan Pajak's column (Girls, Guns & Game)	4690	3720
Field Notes	8216	194	Les Rountree's column (Camping)	5616	2794
Conservation News	7728	682	Keith Schuyler's column (Archery)	4753	3657
Hunter Education	6380	2030	Don Lewis's column (Guns)	7409	1001

4. WOULD YOU LIKE MORE, LESS, OR ABOUT THE SAME ON THE FOLLOWING IN GAME NEWS?

	More	Less	Same	N.R.		More	Less	Same	N.R.
Wildlife management	2965	139	5249	57	Photo stories	2765	598	4916	131
Habitat management	2711	225	5367	107	Big game hunting	5035	179	3141	55
Game Commission reports	1713	599	5988	110	Small game hunting	4156	163	4023	68
Trapping	2200	1351	4634	225	Waterfowl hunting	1807	1320	5073	210
Dogs	2464	1024	4753	169	Varmint hunting	2282	1199	4762	167
Recreational vehicles	1015	3619	3534	242	Turkey hunting	4746	196	3403	65
Natural history	3626	576	4065	143	Ecology	2464	739	5029	178
How-to-do-it articles	4302	412	3577	119	Fiction	929	3170	4124	187
					Trophy photos	2140	1223	4941	106

5. HOW WOULD YOU FEEL ABOUT THE USE OF ADVERTISING IN GAME NEWS?

Favor 1859 Object to 5365 No opinion 1186

6. DO YOU HUNT IN PENNSYLVANIA? Yes 13,560 TRAP? Yes 2267

7. HOW MANY PERSONS IN YOUR HOUSEHOLD HUNT IN PENNSYLVANIA? 1.66 TRAP? 0.28

8. HOW MANY PERSONS IN YOUR HOUSEHOLD HUNT LEGALLY IN PENNSYLVANIA WITHOUT A LICENSE? 0.05

9. DO YOU HUNT THE FOLLOWING IN PENNSYLVANIA?

	Yes	No		Yes	No		Yes	No
Cottontail rabbits	7018	1392	Woodcock	2921	5489	Deer	7838	572
Snowshoe rabbits	856	7554	Quail	1285	7125	Bear	3347	5063
Squirrels	6168	2242	Turkeys	6553	1857	Crows	2434	5976
Ruffed grouse	6389	2021	Woodchucks	4887	3523	Ducks	2115	6295
Pheasants	7165	1245	Raccoons	1313	7097	Geese	1892	6518
Doves	3118	5292	Foxes	2302	6108			

10. APPROXIMATELY HOW MANY DAYS DO YOU HUNT IN PENNSYLVANIA ANNUALLY? 31 per family; 18+ per individual

11. APPROXIMATELY HOW MUCH MONEY DO YOU SPEND ANNUALLY ON HUNTING AND RELATED EXPENSES SUCH AS GUNS, AMMO, CLOTHING, GASOLINE FOR HUNTING TRIPS, ETC.? $233 per family; $140+ per individual

12. DO YOU USE PENNSYLVANIA GAME LANDS FOR

	Yes	No		Yes	No
Hunting	6862	1548	Horseback Riding	182	8228
Hiking	4368	4042	Birdwatching	1664	6746
Photography	2396	6014	Dog Training	1565	6845
Snowmobiling	359	8051	Nature Study	2965	5445
Trapping	536	7874			

13. EDUCATION LEVEL COMPLETED

Grade School 902 High School 5140 College 1539 Graduate School 794 N.R. 35

Who is the Oak Leaf Roller?

By Robert A. Fala

LET'S CONSIDER the oak leaf roller, alias the "bug" or "whatzisname." Is this critter plant, animal or simply a legendary villain? Actually, the oak leaf roller is a moth in its adult stage and a member of the immense insect clan. Entomologists (insect biologists) have formally named him *Archips semiferanus.* At any rate, this native insect was just a species among thousands until it made its debut in the mixed-oak forests of northcentral Pennsylvania in the late 1960s. And what a debut!

Like the more publicized gypsy moth, the oak leaf roller is a defoliator, or one that devours the leaves of trees. When trees are defoliated severely for several years, death will eventually result, as the leaves are the photosynthetic factory that produces food for the tree. As the name implies, oaks are this insect's favorite bill of fare; other species such as red maple are less preferred but eaten. The leaf roller portion of its name stems from its ability, while in the caterpillar stage, to tie together parts of a leaf or two leaves with the silk it produces.

Most Destructive Insect

According to Bureau of Forestry personnel, this insect has killed more timber in Pennsylvania's forests than any other insect so far recorded. It is estimated that over one million acres were defoliated in 1970 and 1971, with at least 100,000 acres suffering 90 to 98 percent oak mortality. Logging operations to salvage the dead timber are in progress and at this writing over 13,000 acres of state land have been clearcut and salvaged. Several of these salvage cuts can be seen while driving on routes 144 or 879 in the heart of Pennsylvania's big woods country. Fortunately, the infestation has subsided in the past couple of years in this state.

The life cycle of this moth, like many other butterflies and moths, shows four distinct stages: egg, larva, pupa, and adult. This development into several completely different forms is known as complete metamorphosis. The pea-size egg masses are deposited on the bark of trees where they overwinter. In spring the eggs hatch and the larval or caterpillar stage emerges. The larval stage is the destructive one for the caterpillars feed voraciously on the foliage of host trees. After feeding for about a month the caterpillars pupate. The pupal or resting stage lasts about two weeks. The tan-colored and penny-size moths then emerge from the pupae; the moths themselves are not destructive. The adult or moth stage is when breeding occurs to replenish the population in the following spring.

New Browse

The energy-giving sunlight reaching the forest floor of the logged tracts and other areas where moderate to heavy tree mortality has occurred produces a new flush of browse. Early successional or brush species such as deer and grouse will benefit. On the other hand, squirrels and turkeys will be hard pressed to find any acorns in stands where heavy oak mortality has occurred.

Although much timber is being obtained from the salvage cuts, foresters are concerned about the restoration of these logged areas. Since most of the stands killed were not mature, very few seedlings had developed under the dense shade. Also, the cut trees cannot "resprout" from the stump as they usually do for they were dead when cut. Planting may be the only means of reforesting some sites.

One benefit has come from the activity of the oak leaf roller. The in-

sect has broken up a "cornfield" situation over several million acres of Penn's Woods. The cornfield of even-aged mixed oaks was an "unstable" environment, as an ecologist would put it. In a forest monoculture, the forester must continually fear an insect or disease attack as he has all his eggs in one basket—a continuous stand of trees of one age and one type. Wildlife managers know that game is a product of the edges of different types of diversity. These diverse areas are the exact opposite of a monoculture, a non-productive game type.

Luckily, today's land managers use a sustained yield program where only a small percentage per year of a forested tract will be logged. This creates a continuous annual crop of trees and a more diverse and beneficial habitat for wildlife. No large monocultures of unstable or non-diverse areas will be created by this management. We have learned an expensive lesson from past generation mistakes—that is, that all of us must work in harmony with the land.

Change in Trapping Date

At a special meeting on September 5, 1975, the Pennsylvania Game Commission amended the seasons and bag limits adopted on June 4, 1975.

The trapping season for foxes, raccoons, skunks, opossums, and weasels will open on November 9, 1975, rather than on November 27, 1975, as listed in the "Hunting and Trapping Digest" and "Excerpts from The Pennsylvania Bulletin 1975-1976."

Reference

Pennsylvania Department of Environmental Resources, Bureau of Forestry, Division of Forest Pest Management. Leaflet No. 29, Oak Leaf Roller. 4 pp.

Books in Brief . . .

(Order from publisher, not from Game Commission)

A Bird-Bander's Guide to Determination of Age and Sex of Selected Species, by Merrill Wood, College of Agriculture Press, Box 6000, University Park, Pa. 16802, 181 pp., $3.18. A technical set of keys describing birds commonly banded in the northeastern states. Mr. Wood draws on information gained from a long career as an ornithologist in describing methods of determining age and sex of live birds. Species included are the perching birds and a few other species handled by bird-banders. Omitted are waterfowl, hawks, all large and heavy-bodied game birds, most shorebirds and most owls. An excellent manual for bird-banders and ornithologists.

Autumn Hawk Flights, the Migrations in Eastern North America, by Donald S. Heintzelman, Rutgers University Press, 30 College Ave., New Brunswick, N.J. 08903, 398 pp., $30. Each fall tens of thousands of hawks move southward above the mountain spine of eastern North America. This is the first full-scale book about this spectacular migration. Heintzelman, an ornithologist, has spent almost two decades studying these hawk movements. This book presents much of his data, along with a synthesis of information from many others. Besides giving instruction on study methods and identification, it also gives precise locations and details on over 100 hawk lookouts in the eastern U.S., Canada and Central America, and there are extensive technical data on autumn hawk migrations. Many photos, maps, charts, tables and graphs. A scholarly yet readable work; highly useful for the many persons fascinated by these impressive birds.

HUNTER EDUCATION

By John C. Behel
PGC Hunter Education Coordinator

Shoot or Don't Shoot?



MIDDLE CREEK field trail teaches young hunters that fence crossings are no safety problem if guns are unloaded first, handed across.

"SHOOT OR don't shoot?" . . . "Safe or unsafe?" At Ephrata High School it all depends on the student's judgment. Simulated hunting conditions on a hunter education field trial provide that extra experience in safe handling of sporting arms that otherwise would not be presented in a hunter education classroom or verbal examination. In the field, split-second judgment of what you see is a totally different ball game.

Ephrata High School hunter education students get that extra training with their field trail. Under the guidance and leadership of Carl Graybill, Vo-Ag teacher at Ephrata High School, students have developed a physical course of instruction at the Pennsylvania Game Commission's Middle Creek Waterfowl Area. Hunter education programs from different areas will also use this trail. Thousands of visitors to Middle Creek have already noted the sign at the entrance of the trail, which is adjacent to the conservation trail and next to the Visitors Center. The hunter education here at Middle Creek includes excellent displays and examples of conservation wildlife management practices. If you don't see what you're interested in, just name it and in all probability Charlie Strouphar, Waterfowl Management Assistant, can direct you to it.

The Ephrata HE Instruction Trail is an extension of classroom hunter education designed and developed by the

LITTERING—a common problem in our outdoors—is observed and discussed along with other areas of hunter responsibility.



Cloister FFA of Ephrata High School. Many helping suggestions have been contributed by the students participating in the program. The course is designed so that the participating individuals are confronted with 20 hunting situations and discussion points.

Each student is on his own as he or she traverses the course and encounters each problem in gun handling or judgment in shooting. Both safe and unsafe shooting situations test a student's classroom knowledge and provide a more practical application in the field while hunting. As one student asked his buddy, "Did you shoot that [replica of a] man? I saw the deer, but not the man." Not all stations are shooting situations. Appropriately, the trail opens with the best beginning for any HE course—that of hunter-landowner relations.



Stations one through 10 test a student's "safe-unsafe" or "shoot-don't-shoot" judgment. The instructor often has the opportunity to talk about target identification and hunter ethics, which are most important to the hunter. How the hunter presents his image to the non-hunter influences sentiment for or against the sport. Says Graybill: "Today's modern hunter education course with field trail handling develops the judgment of today's young hunters and promotes courtesy, respect and sportsmanship."







Rifled Slugs & Shotguns

By Susan M. Pajak

SUE PAJAK studies three shots she fired offhand from 50 yards with her 12-ga. Marlin slug gun. All would have been well within the vital area of a whitetail.

ALTHOUGH the use of rifled slugs and shotguns has hardly been promoted lately as deer hunting equipment, compared to the big mm's, ought-sixes and thutty-thutty's over the years, there isn't a reason in the world why you can't use the slug to take deer, providing the deer is no farther away than 50 yards, give or take a few steps.

At 50 yards, and preferably under that, a 12-gauge rifled slug will do considerable damage. Or to put it plainly so that all will readily understand, it will blow a hole in what it hits like you ain't never seen before! Not only the 12, mind you, but likewise the 16 and 20 gauges.

But the range, or yardage, should be 50 or under; **much** longer than that, say 70 yards or so, and the slug loses a lot of its killing power. At a longer range you are more apt to just wound the deer, possibly allowing it to travel some distance before expiring. If you are not sure of just how far away 50 yards is, step it off from your posting place.

Always be prepared to take, or make, the second shot. Don't sit down and wait for a wounded deer to expire, even if you feel you did "hit him good."

If the deer is down, get to it quietly and if necessary deliver the second shot.

There are special shotguns made nowadays with bores sized specifically for slugs. However, most rifled slug users doubtless carry the regular field-grade shotguns they normally use for small game. Slugs do not fit these bores as precisely, and this, plus the choke which controls the spread of shot loads, complicates the slug user's life. Slugs are

GIRLS, GUNS, & GAME...

safe to fire through a barrel of any choke, assuming the gun is in good condition, but accuracy sometimes leaves quite a bit to be desired. Additionally, double barrel guns usually "crossfire" slugs. That is, because the barrels are installed at a slightly converging angle so that they place their patterns at the same place some distance ahead of the muzzles, the right barrel tends to throw slugs to the left and the left barrel to the right. They may also be higher or lower than you expect at any range. The only way to have any idea of where they will go is to test fire your gun with slugs on a target at a measured range. Single barrel field guns usually handle rifled slugs better than doubles.

In recent years several gun manufacturers have developed and marketed shotguns with special barrels for slug shooting. These have bore dimensions closely matched to the slug's diameter and give accuracy that's plenty good for most woods hunting. (They normally give good results with shotshells on upland game too, as they give approximately skeet or improved cylinder patterns.)

These special slug barrels usually have open iron sights, similar to those which for many years have been fitted to rifles, and these permit you to zero in the slug gun just as you would a rifle. It takes a moment longer to aim with sights than it does to simply throw up a smoothbore and fire it, but since you have only one projectile here, rather than a large pattern, there's no doubt it helps results to aim!

What you should remember when using the slug—and this is a repeat—is to wait until the deer is close and then put the bead right on it.

And carry enough slugs with you. Don't deceive yourself into thinking you'll only ever need a couple. You just never know what the day is going to bring your way. A big buck slipping away might cause you to fire all your slugs and then in a blink of an eye a larger buck could be standing watching you a mere 20 yards away. And there you are with nothing in your pocket but an old dust-covered candy ball!

Mrs. Linda Cowen of Enon Valley, Pa., took a nice 3-point last season in Warren County and writes to say . . . "try using the ribs cut into four- or five-inch pieces in place of ground meat in homemade spaghetti sauce . . ." Thanks, Linda, will do.

500,000 Award

The Game Commission has received a plaque recognizing the training of 500,000 students as Pennsylvania Safe Hunters. This "500,000 Award," given by the National Rifle Association when a half-million students in a state are certified as safe hunters, hangs in the Game Commission's Information & Education library, under the first award recognizing Pennsylvania's efforts in hunter education, received several years ago. Actually, Pennsylvania's figure for HE-trained safe hunters currently approaches 600,000 and the goal in view now is 1,000,000. With approximately 50,000 students taking part in the program each year, even that figure is not unrealistic.

Some Thoughts About Weather . . .

A Highly Unscientific Study!

By Les Rountree



THESE LOW, GRAY "ROLLERS" are heavy with rain, and experienced outdoorsmen know this is not a good time to be flying.

"THERE IS A 50 percent chance of showers tomorrow with the odds tapering off to about 25 percent by tomorrow evening." The official-sounding voice of the weatherman on your radio or TV station puts out something like this every day. He never tells you what the other 50 or 75 percent might be. Will there be a giant fall of frogs? An inundation of spaghetti sauce? The listener is left wondering. I strongly suspect that the reason weather is usually given in such vague terms is that in spite of the sophisticated equipment available today, the ability to predict weather more than 12 hours in advance (at the most) is not a very exact science. I further suspect that crusty old woodsmen and horny-handed sons-of-the-sea can do just about as good a job at weather prognostication as most official forecasters.

Farmers and small boat captains have earned the best reputations as amateur weather forecasters. Their livelihood depends to a large extent on their ability to predict what's coming up next over the horizon. In the case of the coastal skipper, his very life often depends on the accuracy with which he makes his pronouncements. The Indian medicine man learned to observe nature carefully, for his position depended heavily on his accurate predictions. Woodsrunners of our pioneer days, the white men who became "Indian" in dress and habits, were outstanding weather prophets. Their success at hunting, fishing and trapping hinged on reasonably accurate, short-term weather observations.

Today's outdoorsman, while better equipped to handle inclement weather than were his ancestors, can still profit immensely from learning a few basic weather watching techniques. Extended hikes into faraway spots can be postponed, if necessary, for a half day or a full day if the application of some amateur weather forecasting is practiced. A one-day hike or weekend jaunt can be taken in spite of



anything short of an earthquake or a tornado, but when alternate days are available, it's sometimes wise to select the optimum conditions before beginning a trip.

Backpacking safaris can be downright miserable if the trip begins on a rainy day. Everything starts off wet and seldom dries out completely until the trip is over. Wet sleeping bags and tents are bad enough at the midpoint of a trip; if soaked on the first day, the trip can be a disaster. While the truest statement in the world is, "We can't do anything about the weather," we can certainly make compensations for it. The historical colloquialisms about the elements number in the hundreds.

Old as Pyramids

Those who research such things have undoubtedly discovered that practically all famous sayings about the weather have roots as old as the pyramids. I've heard a pile of them recited with stone-faced sincerity ever since I was old enough to listen. In one form or another, most of the more popular weather sayings crop up all across the United States and other countries as well. Some have "weathered" the test of time and have proven to be right more often than not. For example:

"Red sky at night—sailor's delight. Red sky at morning—sailor's warning."

"Lightning on the bare trees means deep snow and a heavy freeze."

"When the fog rolls up the hill, it brings water to the mill."

"Rain before seven—quit before eleven."

"A ring around the moon means rain is coming soon."

"When the wind precedes a sudden shower, look for quiet weather within the hour."

And ad infinitum.

Somehow, the founding weather prophets figured a way to put every major weather pronouncement into an easily remembered verse. It isn't very good poetry but it sure worked as far as the memory process is concerned.



THIS WAS AN Easter Sunday snowstorm in 1970. There was "lightning on the trees" and there also had been a "ring around the moon," so what else could anyone expect?

I'll bet that most readers have heard all of these sayings at some time. If you make the effort, I'm sure several dozen more of these age-old verses would come to mind. But let's look more carefully at the few that we quoted. The color of the sky can and usually does mean something significant. A bright, reddish sunset quite often does mean a fair day coming up. Sure, there are exceptions but it's certainly as accurate as the instrument-laden experts. A yellow sky in the evening usually means a falling barometer and some moisture before morning. Red sky in the morning is not quite so accurate but it can predict high winds or rain.

The "lightning on the bare trees" saying has never been proven to be too accurate in my experience. I've watched this one carefully since I was a boy in Potter County, and only once did it come true in earnest. I believe it was 1947. We had a spell of warm weather during the middle of January and a sodbuster of a lightning



FOG RISING IN THE HILLS usually means the rain is over . . . at least for awhile.

storm occurred. This was a rare phenomenon up that way for January. I saw Herman Grennels in church the following morning and he allowed that we were in for one "school stopper" of a snowstorm. Since the schools don't close in Potter County unless there is at least three feet of snow, I was really interested in his thoughts. I was in high school at the time and the prospect of school closing was inviting. It happened just as Herman said it would. We got darn near 40 inches of snow and the schools did close. You can be sure that particular weather forecasting poem was very popular in northcentral Pennsylvania for many years afterward.

"Fog going up the hill" does, in fact, bring water to the mill. The fog goes up when the rains cease and the water is already on the way to the mill. Here, the weather gambler holds a pat hand. "Rain before seven—quit before eleven" has little foundation, in my experience, but it's fun to say.

There will be a change in the weather when a ring forms around the moon because that ring is formed from moisture particles in the air. If the moisture is there in large enough quantities to be seen, something is going to be falling pretty darn quick. Incidentally, at night, when the ring is around the moon, it will also be noticed that most wildlife is extremely active. If a storm is coming, the animals seem to know it and stock up with an extra mouthful or two.

A high wind before a shower almost always means a rain of short duration and a quick clearing period right behind it. The hunter and fisherman should always try to be in the field immediately following those quick rain squalls. On the rising barometer that follows such disturbances, fish and game seem to be especially active and less wary than usual.

Of particular interest to the outdoorsman is the possibility of predicting the next half day or the next day's

temperature or precipitation. Any idiot can predict a 50 percent chance of "something" and be right part of the time but by observing a few basic weather signs, it's possible to come up with a much higher batting average.

Pilots, sea captains, farmers (the good old, hard-scrabble kind), serious fishermen and outside construction workers keep their eyes on the clouds. Those everchanging lumps of nothingness provide the key to what's going to happen in the near future.

Everyone who has spent a reasonable amount of time outdoors knows what a thunderhead looks like. Those big, black, churning masses look ominous and they are! When one is about to devour you, it means rain and assorted nastiness is here right now. Where the terrain is such that you see for miles, as on the ocean or over a large lake, the appearance of a black thunderhead with vertical bars beneath it means "get off the water!" Those big black rollers can move at an astonishing rate of speed and it's never wise to assume the you can outrun one if you can see it five miles away. It can be on you in minutes.

When the big, puffy, cumulus clouds are snow-white and lolling slowly along, there isn't much to worry about for the next several hours. When those clouds change color, however, it's best to pay attention. Long trails of wispy clouds at high altitudes usually mean a change from good to poor weather but not for 12 hours or more. Very high clouds that are moving in a different direction than the lower clouds also indicate a change in weather, usually within eight to 10 hours. The wind direction is shifting and may mean higher or lower temperatures are coming.

In the northern latitudes, the prevailing winds usually flow from west to east. Any sudden change in direction ordinarily means foul weather is approaching. There is no way in the world to second guess the weather. My finest predicting efforts have gone to pot on so many trips that I hesitate to recite any more of those foolish (?) rhymes. But ever since the day that the first caveman could communicate with his fellow creatures, we have all tried in some way to figure out what was coming up next on the weather agenda. Many jokes have been made about country bumpkins talking about the weather and not much else . . . but it's really no laughing matter. It could well be the most important subject in the world. The daily weather affects the plans of all living creatures. Great battles have been won or lost due to sudden shifts of wind. Civilizations have perished because of climatic phenomena. The course of history has been constantly changed due to peculiar weather happenings.

Carry Rain Jacket

My advice, then? Carry a rain jacket in your pack at all times . . . even on the cloudless days. Study all of the weather sayings you can find and discard those that don't seem to work. Keep your eyes on the clouds (they're as foolproof as the U.S. Weather Bureau) and for heaven's sake, don't step on an ant just before you take off on a camping trip!

The Thundering Herd

For all their great bulk, bison are fleet-footed animals, capable of dashing across the plains at a speed of up to 40 miles an hour.

Can't Swim, Though

The wings of a butterfly are made up of scales similar to those on a fish.

Right for Rabbits

By Keith C. Schuyler
Photos from the Author



ONE RABBIT is a good day's bag when hunting with the bow. The inherent difficulties give this "lowly" game increased stature.

BOW HUNTING is a little like sourdough. It takes a starter to produce the best results, and there must be something left over to keep the whole thing going for the next time around.

With the continued accent on deer hunting with the bow and arrow, some bow hunters may get the impression that this is what it's all about. Actually, taking a deer with a bow is the epitome of bow hunting rather than the usual occurrence. Between the first bullseye and the first deer can be many years and much frustration. Too many attempt to reach the top without proper preparation and practice.

It was all too evident to those who travel bow hunting trails that a considerable segment of our bow hunters needs much more than is taken into the woods from the standpoint of experience and ability.

We have stated here numerous times that no one who cannot handle 40 pounds of bow should attempt to take a deer. Members of the Pennsylvania Professional Bowhunters Society pledge to not hunt deer with less than 45 pounds at the hunter's *natural draw.* The Society recommends 50. This immediately eliminates a certain percentage made up of those who lack the ability to hit the killing area on any big game with consistency.

An excellent way in which novice bow hunters and youngsters can develop their hunting eyes as well as their arms is in hunting the not-so-lowly cottontail. This shooting is available throughout the small-game seasons without a major excursion for the hunt.

There are a number of good reasons to single out the cottontail for developing hunting skills. The rabbit's size approximates the killing area on a deer. It can be successfully taken with any reasonably weighted bow and field arrows. In fact, my prefer-

ence is for field tips every time when hunting rabbits.

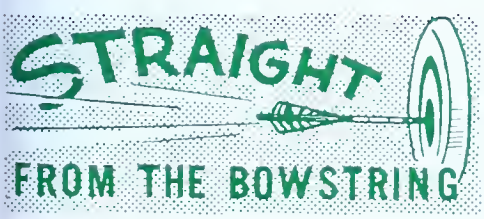
One rabbit represents a good day under average hunting conditions in Pennsylvania. Anything over one is a big event, and any time you take the daily limit of four in one outing is a red-letter day indeed. In over 35 years of hunting small game off and on with a bow, I accomplished that only once. That day I didn't miss any. Hunting rabbits with the bow is sport sufficient in itself if you hunt nothing else.

Despite the fact that many shots are quite close, the ability to miss comes quite naturally. Experienced archers are quite aware that it is difficult to hit close targets simply because little practice is normally taken at anything under 20 yards. Even on a standard field course, the closest distance is 20 feet at a 6-inch target.

Tricky Shooting

Since shots in the the field are usually anywhere from six to 60 feet, and the vertical killing area on a cottontail is considerably under six inches, even a stationary target within those distances makes for tricky shooting. Furthermore, the target has a brown sameness that is difficult to spot and to fix as a target under field conditions. Add to this the probability that there will be intervening grass or hidden rocks to further complicate the shot, and the problems are obvious.

The point in total is simply that shooting rabbits with the bow and arrow is far from easy. This is, if they are sitting tight. It's even harder if they're moving. Rabbits on the run represent another dimension that requires all the skill and all the good luck at your command. In many years





IT TAKES sharp eyes—and a knowledge of where to look—to spot a cottontail in his nest. Usually the eye is the most visible part of him.

of personal hunting, my total score on running rabbits is still one short of a single day's limit.

Nevertheless, rabbit hunting is a natural for youngsters, particularly those who have reached legal hunting age but are yet unable to properly draw a bow for big game. It is excellent practice for the more robust types who can master the muscle requirements but have difficulty hitting their mark. And for the fellow who welcomes any challenge, it is a game worthy of the best bow hunters around.

Cottontails parallel bluegill sunfish in their plentifulness as well as their distribution. You can find them almost anywhere in the state, and it is impossible to overshoot them with the bow. As long as two healthy specimens of opposite sex remain through the winter, that area will be well populated by the following fall.

Those accustomed to just walking through likely cover with the hopes of flushing cottontails need a new approach. When hunting with a bow, the idea is to see them before they take off. It is great sport shooting at them on the run, but most of us would starve to death if that was our only means of procuring meat. Only a meat hunter would shoot a rabbit in the nest with a shotgun, but any of

them are fair game where you find them when hunting with a bow. Just trying to find one is sport in itself.

This is where youngsters have an advantage over their parents who don't see so well anymore. But, being able to recognize a rabbit even when you see one takes a certain amount of ocular ability. As with all wild creatures, rabbits instinctively choose a spot which will augment their natural camouflage. This is frequently a tuft or bed of dry grass which perfectly matches the natural brown of rabbit fur. The giveaway to those searching for cottontails is most frequently the eye. However, this is only visible if you come upon the animal from a direction in which the eye is visible. Otherwise, the hunter must learn to look for any object which does not perfectly fit in with its surroundings.



FIELD-TIPPED arrows are recommended for rabbits. They are very efficient on this size game and eliminate the safety problem which sometimes comes up with broadheads.

Rabbits have learned from long experience that, despite their speed and frequently erratic route when alarmed, they are safest if they remain still. I have actually seen dogs step around a sitting rabbit as though it were just another stone. Although a good dog may scent a sitting rabbit, and it is not unusual for a bird dog to point one, the animal's scent seems to be much subdued if it remains motionless. Again, instinct apparently tells it that it will leave a trail once it breaks from its bed.

Lost Faith

Even so, rabbits will run if a person or a dog gets too close to them. Many of those which break for a dog have simply lost their nerve because the animal was rooting around and the rabbit lost faith in its natural camouflage and subdued scent. When hunting with the bow, it is generally a good idea to keep slowly on the move as much as possible, looking as you go. Many times a cottontail will sit tight as long as you are moving but will break if you stop, for it seems to feel it has been spotted. Other times, it may remain motionless while you are stopped, but will cut loose at your very next step. For this reason, once you do spot a sitting rabbit it is a good idea to keep moving until you are in a good position for the shot. Then, don't hesitate!

On a miss, the rabbit will seldom stick around to give you a second try, but this is far from a hard and fast rule. There are times when a rabbit will permit two or three shots so long as no arrow touches its body or fur. As in any phase of hunting and fishing, there are no positives. Occasionally, a rabbit will run out ahead and then stop as though to reconnoiter. This happens most often if the animal takes off on its own without having been shot at either in the nest or on the move.

This calls for a bit of judgment on

the hunter's part. If he waits for the halt, the rabbit may keep going and make the running shot twice as tough —if a shot can be taken.

The last rabbit that I took running first gave me a shot so close that I feared to bring the bow to my usual drawing position. Instead, I simply pulled the bow back at arm's length and tried to point the arrow at the rabbit. At the release, the cottontail shot out of the nest, leaving my shaft with just a couple hairs on it to indicate that it was only close. A few minutes later, after nocking another arrow and continuing on, I saw a rabbit come tearing through the weeds and grass to my left, and I almost subconsciously swung and released. I was much more surprised than the rabbit when the arrow connected. It was an unusually large one, and appeared to match the one I had just missed, so my assumption was that it was the same animal; they seldom go running around during the day in early fall. It is natural for a rabbit to circle when a dog is after it, but there was every reason to believe that this one had circled on its own.



AS WITH gunners, a dog increases the chances of seeing rabbits, but shots are far more difficult when they are moving rather than sitting.

Frequent Stops

That brings up a very good point. With a slow beagle, you can have considerable extra sport by hunting much as you would with a gun. This is particularly true in heavy cover where it is difficult to see rabbits in any event. It takes a dog to move them out and keep them going. By stationing yourself at a runway or crossing, you have a chance to get shooting when the dog brings the rabbit around. A cottontail often runs well ahead of the dog and makes frequent stops to keep its pursuer located. Or it will pick its way carefully through thickets or hop purposefully down paths and runways. Some of my more auspicious misses have occurred under such circumstances.

If you don't have a dog but are hunting with companions, you can take turns *dogging* the heavy thickets. It is not unusual for a rabbit to hop out of heavy cover and then stop or move slowly along, looking for a good place to go back in.

Much of such action is missed when hunting with a smoothbore because the gunner's real sport is in dumping a cottontail when it is at full speed. There is no need to pussyfoot along through the brush in an attempt to slow down the exit of the quarry.

The bow hunter who moves slowly with his eyes wide open will sometimes get shooting at rabbits in early morning before they have made their nest for the day. At such times they hop around looking for suitable cover and offer better than usual shooting. One morning while on a deer stand I watched a cottontail hollow out a nest. It didn't take long to get settled in the dry leaves where it could hear and see anything coming its way. In fact, when I left the stand, the rabbit bounced when I was some distance away from where it had bedded down

in its camouflaged nest for the day.

I have never seen a cottontail use the same nest twice after it has been shot at and missed with a gun, but the same doesn't hold true with the bow and arrow. Consequently, if you jump a rabbit and miss, don't disturb the nest. You may come back another day and find it has returned. And this time you should be able to spot it sitting before it takes off again.

Post-Christmas Season

Don't miss out on the post-Christmas extra season. You can hunt the same ground where it appeared that all the rabbits had been shot off, only to find plenty of action. Rabbits are much more difficult to approach, on the average, when there is snow on the ground or cover is considerably reduced by repeated frosts. But, whereas rabbits will either sit tightly in their self-created nests or amid the foliage in the earlier months, they frequently are on the move during the colder days when there is snow on the ground. If you just approach a thicket which would have been all but unpenetrable in November, and look it over very carefully, you may see a number of rabbits moving around in December and January. Your shots will be much longer although usually you can wait a rabbit out until it decides to stop.

If there is crust on the snow, your arrow may skip. This is important from a standpoint of safety to others hunting with you or to a dog if you are utilizing one for the hunt. Also, it is easy to lose arrows that go skipping off another 50 yards or more to bury themselves under the snow. Regardless of where you are shooting when there is snow on the ground, it is well to mark the spot visually. Arrows that don't skip on the crust may travel considerable distances beneath it if the shot is on a flat angle.

When it comes to bow weight for rabbits, it really doesn't make much difference as long as you can properly handle it. Since I am doing most of my shooting with a heavy bow at that time of year, I usually use the same bow that I carry deer hunting.

After many years of chasing rabbits, I'm convinced the regular field point is best for rabbits. It has sufficient killing power and it will usually remain in the animal. A broadhead, while extremely effective, too often will shoot through the rabbit and go skipping away. Though mortally wounded, the animal may make it to its burrow and be wasted.

On only one occasion has a hit failed to score for me. It was a 40-yard shot on a motionless rabbit. The arrow struck just a bit too far back and before I could get to the rabbit it had ducked into a woodchuck hole. All I recovered was the arrow. My momentary elation at making such a shot was smothered when I saw the cottontail escape. Although a miss would have been much preferred, the incident is mentioned only to illustrate that the field arrow is still the best bet to take cottontails with the bow.

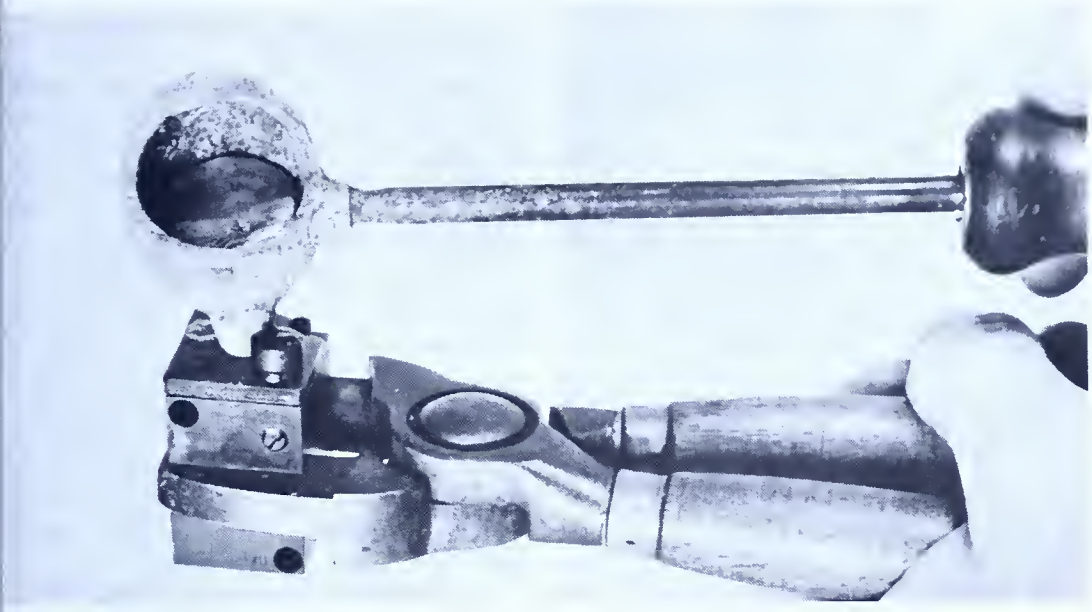
Hunting rabbits with a bow is a challenge that in itself makes the game worth playing. If you want to make a trophy out of the common cottontail, give it a try.

Flat, Scaly Balancer

The tail of the beaver is scaly and flat. Contrary to popular belief, it is not used to excavate earth but, among other functions, helps the animal stand erect.

And the Loudest Cackle

The ring-necked pheasant has the longest tail of any American game bird.



HERE A LADLE SPECIFICALLY DESIGNED for the job is used to pour lead into a bullet mould. It's possible to use a spoon for limited production, or pour directly from some electric furnaces.

KITCHEN-COOKED

By Don Lewis

Photos by Helen Lewis

THE FIRST TIME I watched a batch of lead cooking on a crude hotplate fired by a gasoline stove, I thought it was a pure waste of time. It seemed rather incredible to spend a lot of time fussing with hot plates, lead dippers, iron moulds, sticky lubricants and reloading presses to get a shell with a lead bullet when good factory fodder was available for just a few cents per shell. I guess I should point out this was way back in 1947, and inflation had not become a byword. Also, the thought of ever becoming a dedicated handloader was far, far from my mind.

After all the fussing and puttering needed to cast the bullets, lube and reload the cases, the fellow nonchalantly blew the entire batch away in a rapid fire session at a life-size deer target 75 yards away. My eyes blinked with amazement that any hunter would be crazy enough to burn up good ammo on a paper target. Worse yet, he began the whole process over again and fired another full box at the same target. When I diplomatically asked about this, he just shrugged his shoulders and told me he used factory stuff on hunts and the "kitchen cooked" junk for practice.

The last statement hit me then with a great deal of impact. In fact, it put bullet casting and handloading in a bad light, and it proved my deep suspicions that handloading wasn't what it was cracked up to be and cast bullets weren't reliable for hunting purposes. I'm sure I was misled by his use of the word "junk." I know today he meant nothing by it, but prior to the early 1950s, handloading and bullet casting were having a difficult time catching on with the average gun buff.

Actually, this handloader was not wasting ammunition or his time. The truth is he was benefitting from his



ANY SOURCE of good heat—electricity, gas, whatever—can be used to melt the lead-tin-antimony mixture normally used for cast bullets.

speed practice sessions, and casting his own bullets for practically nothing moneywise gave him an excellent opportunity to practice as much as he wanted to. The practice must have made him a better shot for I still remember he slammed most of his shots into an area considered vital, and that was excellent shooting for the pace he was throwing lead.

I saw the error in my thinking a few years later when handloading became an important and necessary part of my hunting career. For the next decade, I watched handloading grow like weeds in a garden. As if by some wave of a magic wand, the idea of cranking out homemade ammo took the shooting crowd by storm. Everyone started getting into the act. Handloading gear was set up in attics, basements, garages, bedrooms, and some of the more ingenious shooters made portable outfits to carry with them on hunts. While the wife was cooking hamburgers on a bed of hot wood coals, a varmint hunting pal of mine would be busy handloading with gear bolted to his car's bumper. Now that's ingenious.

The world of the jacketed bullet enjoyed tremendous popularity, and in fact, still does. It's quite a different story for the bare lead bullet. Now it seems just as incredible to me that literally thousands of shooters are overlooking the benefits offered by the plain lead bullet. I'm not denying the fact that a good size fraternity of avid casters and lead mixers exists in the Keystone state, but it's really a small minority compared to the users of jacketed bullets. This lopsided ratio shouldn't be, and a little light on this subject might start a trend that would level the scales, so to speak.

I think bullet casting suffers from several factors. First, it's a misunderstood part of shooting. In other words, why bother with formulas, molten lead, and complex methods when 100 shiny bullets can be purchased at any gun store? I'm not insinuating the average hunter or shooter is ignorant about casting, but I think he is not well informed. Bullet casting suffers right now from some of the same misconceptions that kept handloading from being popular with the individual during the depression era and post World War II period. To make it simple, let me just say it's shrouded with a cloud of mystery and uncertainty. It sounds too complex for the average hunter.

I know this to be true. The first time I heard a group of bullet casters discuss proper methods, I was sort of turned off by their little secrets, hidden dangers and a lot more hogwash that was just hot air. I'm not trying to oversimplify it, but bullet casting is nothing more than pouring hot lead in a bullet mold of the correct tem-



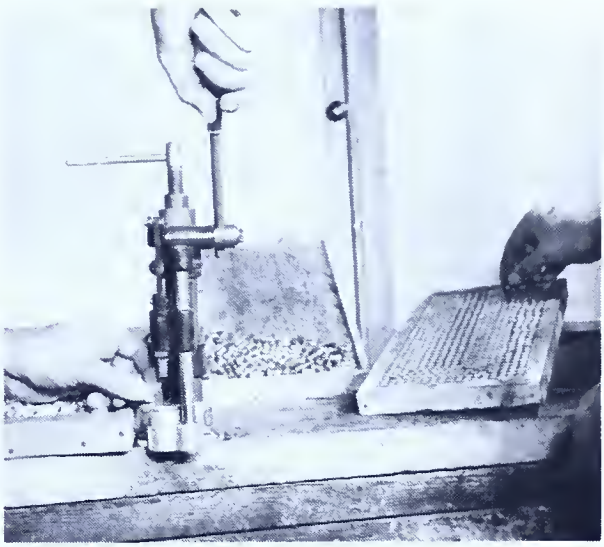
perature and dropping out a perfectly formed bullet. Before I'm set upon with wrath and vengeance, I'll admit it requires time to develop a system and also learn a little about lead and how it's alloyed and mixed. And this won't be learned in one evening's efforts, but it's a far cry from being too complicated for any hunter or shooter who is willing to learn by study and practice.

Like every hobby or sport, gathering equipment can be vast and somewhat costly. I started handloading with a press, a scale and two sets of dies. I had only the bare necessities, but my equipment got me through several summers of good chuck shooting before I began to expand. This is true with the field of bullet casting also. I guess all that is really needed is an iron bucket to melt the lead, a dipper and a mould of the proper size to form the bullet. My advice here would be to invest enough to get started with reputable gear.

Enjoy Setting Up

I've always enjoyed setting up equipment, making benches, and improvising wherever possible. Just to buy everything takes some of the joy out of it for me. Still, I realize not every person likes to do this nor would some have time. For practical purposes, sticking with factory gear is the best route to follow. Some of the old-time bullet casters may take dim views of my advice, but if more had been written on bullet casting on the beginner's level down through the years, a lot more lead bullets would be in use today.

No doubt about it, the main element in casting has to be the lead. It's from this gray, dense material that the final result will come. Besides being the main ingredient, it's also the most misunderstood one. I'm no expert in metals nor do I know a great deal about lead, but to cast a few hundred bullets for a favorite 30-30 or pet handgun doesn't require a degree in metallurgy. Common sense and stick-to-it-ivity will overcome the few problems involved with knowing what lead to use.



STAR TOOL here is being used to re-size and lubricate 148-gr. wadcutter bullets for use in 357 Magnum revolver. Same bullets (not cartridges) can be used in 38 Special.

Pure lead is not suitable for bullet making except for black powder guns. Muzzleloaders in either percussion or flintlock have very slow rifling twists, perhaps one turn in 48 inches, and can use pure lead. The quick twists of modern firearms make pure lead impractical; it's too soft to follow the riflings and will strip over them. Even cast bullets that have been hardened are not usually suitable when velocities rise much over 2000 fps.

To overcome the softness of pure lead, a lead-tin-antimony alloy is commonly used. Lead and tin mix very well, as lead melts around 600 degrees Fahrenheit and tin at about 400 degrees. Lead and antimony also mix, but antimony should not be used without some tin. Antimony melts at around 1000 degrees but will not remain mixed when the alloy solidifies. Rather, the antimony will separate out and be found by itself surrounded by lead. In the lead-tin-antimony mix, antimony crystals will be found, but will be part of the mixture.

Antimony is important in the mix because it hardens the alloy and thus raises the melting point. This cuts

down the danger of leading or fusion. Wheel weights make good bullets as they contain roughly 90% lead, 1% tin and 9% antimony. On the other hand, cable sheathing is nearly pure lead with only tiny amounts of tin and antimony. Printer's lead can be used as is for making hard bullets, for it contains about 84% lead, 3% tin and the rest is antimony.

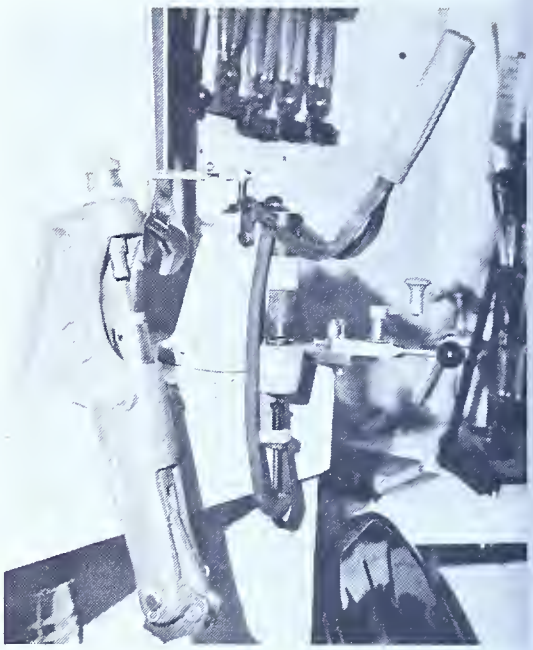
Lee Precision, Inc., Hartford, Wis., explains in their bullet mould instructions how to solve this problem. According to Lee Precision, "Mixing wheel weights, printer's type, toothpaste tubes or bearing metal with your lead will harden the metal. Exact alloy or composition is unimportant. If in doubt, throw in some extra wheel weights to harden the metal. Be sure your alloy contains some tin." Explaining how to get tin, Lee Precision goes on by saying, "An easily available supply of tin is in the form of bar solder; 50/50 solder contains 50% tin and 50% lead."

The point of all this is to show that getting lead is not a major problem. With a little patience and record keeping, the new bullet caster will soon learn when the mixture is correct for the type of casting being done. Lyman's "Cast Bullet Handbook" is a must for every new caster. It contains every bit of advice needed to get started.

Electric Furnace

Although a plain iron pot heated with any type of flame will suffice, I think the beginner will get better results from the electric furnace. With the electric furnace or melter, especially the more sophisticated outfits such as Lyman's Mould Master Furnace or Lee's Production Pot, an even temperature is guaranteed. These are both top quality outfits with temperature controls and pouring spouts, and each holds up to 10 pounds of lead. The little Lee Precision Melter offers a four-pound capacity, does not have a spout, and operates at just one heat, but it's a good tool for the novice.

Anything from a common spoon to



LYMAN 450 lubricator, center, resizes, lubricates and seats gas checks on bullets in one operation. This efficiency simplifies handgun reloader's life.

the egg-shaped lead ladle can be used for pouring, but something similar to Lyman's cast iron ladle with a tiny pouring spout is the most practical. With a small melter, the Lee Dipper is easier to use even though it's possible to get the larger ladle in the melter. The Lyman ladle is designed to hold the molten lead in a minature cap that has a pouring spout on its side. This allows the mould to be held in a horizontal position with the ladle's spout against the pouring hole on top of the sprue cutter. All that needs to be done is slowly bring the mould and ladle to a vertical position, filling the mould's cavity and allowing a small amount to spill on top of the sprue cutter. A few seconds later the lead will set, and a sharp rap with a wooden mallet will cut the sprue from the base of the bullet.

The more sophisticated electric furnaces have pouring spouts, and I fill the mould right from the furnace. Some very knowledgeable bullet casters claim they have better control with the ladle while forcing out the air. They believe a more uniform bullet is the end result. This could

be true, but I feel it's no problem to fill the mould from the furnace, allowing an excess to form over the sprue cutter. After a system is developed, perfectly formed bullets free from defects and crinkles will drop.

I don't see much point in describing here each step required in bullet casting; the manuals do this. My main interest is to get across to the reader that casting lead bullets is free from dark secrets or the possibility that only a few have the innate knowledge to make these projectiles.

My main reason for not suggesting the kitchen as an ideal place to melt lead is the element of danger involved with a potful of molten lead. This is another reason I prefer the electric furnace. Temperatures remain constant and there is no flame. I installed an exhaust fan in my own small casting room, not because I'm afraid of lead poisoning, but simply to remove the smoke and fumes when I flux the lead.

I'm aware the gases formed in the fluxing process can be lighted, but in close quarters I prefer the exhaust fan. I should point out that fluxing puts the tin back in the bullet alloy. Tin, being lighter than lead, rises to the surface and appears as a scum. Perhaps the muzzleloader fan would skim the tin off so the lead would be softer, but the handgun or rifle caster wants the tin mixed through.

Fluxing can be done by dropping in a pea-size amount of beeswax, bullet lubricant, or one of the commercial products such as Marvelux made by Marmel Products, Utica, Mich. When the fluxing operation is finished, the surface of the lead will appear bright. If splotches of dirt appear, they should be removed and discarded.

I can't overemphasize the safety side. While casting is really not dangerous, it's not hard to get a severe burn. It's next to impossible to work with hot, liquid lead and not do some splashing. That is why I wear heavy gauntlet-type gloves along with safety glasses. An apron isn't a bad idea, and don't wear open top boots or bedroom slippers. Personally, I don't know of a case where a potful of hot lead was spilled, but there's always the first time. I even go so far as to keep objects from falling into the melter. Once I put some defective bullets on a shelf above the furnace, and as I was fluxing the metal, one of the bullets fell and struck the outer edge of the melter. I was stirring the lead at the time, and I dread to think what might have happened if the bullet had plunked into the metal.

To Get Started

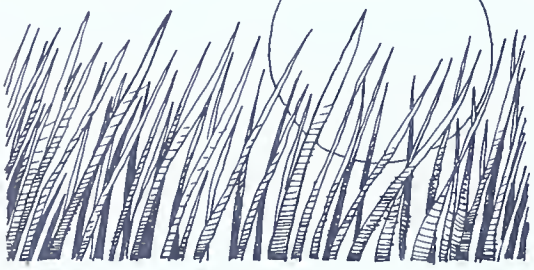
Buying the gear will have to be a personal matter. To get started I suggest a small electric furnace, mould of the correct size, ladle, and a bullet sizer and lubricator, because all lead bullets must be lubricated. Of all this equipment, the biggest outlay will be for a lubricator. The Lyman 450 works very well, and with this tool both sizing and lubricating will be done at the same time. Gas checks can be attached with the 450 at the same time.

One of the advantages of casting is that it permits the caster to mould a bullet to the exact dimensions of a particular barrel's bore. By slugging the bore (this is explained in the Lyman manual), the proper bullet diameter can be determined, and it then can be sized to fit the bore. I think this reveals that the lubricator/sizer does more than just stuff the bullet grooves with grease.

The era we live in leans heavily toward power and high velocity. Today's shooters speak in velocity terms unthinkable a few decades ago. The world of the bullet caster rings with nostalgia for it takes us far from the blistering speed of today's centerfires and lets us roam at will through velocities that seldom reach the 2200 fps mark. This may seem a step backward, but the cast bullet has plenty to offer. It can make better marksmen out of all of us.

In the wind

chuck fergus information writer



If any proof is needed that every living creature plays a useful role in nature, a Utah scientist is about to supply it. If it were not for the despised mosquito, says Dr. Lewis Nielson of the University of Utah, some of our most beautiful wildflowers would vanish. Male mosquitoes, like bees, feed on the nectar of flowers and apparently pollinate the blossoms and enable the flowers to reproduce. Mosquitoes are also a source of food for fish, birds, bats, dragonflies, and spiders.

The National Wildlife Federation has launched a Bicentennial project designed to help save the American bald eagle from extinction. The three-year project calls for establishment of a computerized eagle data bank which will serve as a repository for all available information on this bird.

In the first judgement ever awarded in Ohio for destruction of wildlife, a Cuyahoga County court ordered the Gould, Inc. company to pay the state $250,000 for damages to Ohio's clam population. The ruling is one of the largest amounts ever awarded by a court in the U.S. for destruction of wildlife on an inland waterway, in this case the Muskingum River.

Joint efforts are underway in Utah to improve raptor management. The Division of Wildlife Resources, U.S. Forest Service, and Bureau of Land Management have joined forces to conduct a statewide study of birds of prey. A raptor specialist will work full time on the project. The first phase of the study will inventory resident, nesting and migratory seasonal populations by species. Active, historic, and potential nesting sites and habitats will be determined. After the surveys are completed, the agencies will try to protect and enhance important habitat.

Some of the world's rarest animals—the Bengal tiger, Asiatic lion, one-horned rhinoceros and snow leopard—may fall victim to India's crushing food and population dilemma. Dwindling habitat, farming, livestock and woodcutting operations, and poaching are all problems. India has seven national parks and 140 wildlife sanctuaries covering roughly 0.4 percent of the total India land area. Few wild animals are seen in India except in the refuges.

A Kansas man has been fined $1500 for killing a golden eagle, which is against state and federal law. The eagle was shot near Sitka, KS. The Kansas Forestry, Fish and Game Commission spent eight months tracking down the violator. A Commission spokesman said, "Our main concern is indiscriminate shooting of eagles in Kansas during winter months when they are here." The incident shows how wildlife agencies are involved with all wildlife rather than only game animals, even though the agencies are supported mostly by hunting and fishing license revenues.

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COVER PHOTO BY TOM FEGELY

Perhaps no other Keystone State animal is held in as much awe as the whitetail buck. Eyesight keen as a turkey's, a sense of smell acute as a bear's, hearing as sharp as that of any critter in the woods—these combine to produce an uncanny, undefinable sixth sense for danger. Every December, with deer season close at hand, the thoughts of outdoor-oriented Pennsylvanians turn to the elusive whitetail buck. To whet those already-sharp appetites, here is our annual "deer issue"—though it's not officially designated as such. We at GAME NEWS wish you good reading and good hunting . . . and who knows, maybe you'll get a chance at a nice buck like the one on our cover.

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EDITORIAL . . .

Looking Backward . . . and Ahead

WITH THIS ISSUE, we conclude our "When the Red Gods Smiled" series, begun in last January's GAME NEWS. Growing out of a poem by Kipling, its basic purpose was to share with readers the satisfactions of certain days in Pennsylvania's outdoors as relived by some of our best known outdoor writers. I feel it attained its objective. Take a moment to recall the authors and their stories: Jim Bashline, "Sam Is My Dog," George Harrison, "A Hootin' Night in Hidden Hollow," Dave Drakula, "In Search of Bigfoot," Al Shimmel, "Two Boys, Two Dogs, Two Rabbits," Nick Sisley, "Susquehanna River Gobbler," Roger Latham, "And Fantails in the Grapevines," Tom Fegely, "Six for Five," Keith Schuyler, "First & Finest," Don Lewis, "The Day I Couldn't Miss," Will Johns, "Through Long Lonely Hours," Charley Zaimes, "A Buck for Dimitri," and Ned Smith, "Last Day Buck." The series pretty much covered the gamut of Pennsylvania hunting. The four deer stories perhaps weighted things a bit toward whitetails—but then, maybe not; if any animal is beloved by Keystone hunters, the deer is it. And somehow the ringneck got missed—but that often happens in real life, too. Otherwise, we hit rabbits, turkeys, grouse, squirrels, snowshoe hares, dogs—even owls! We hope you enjoyed the subjects and the presentations.

You'll remember that we presented a shortened version of Kipling's poem "The Feet of the Young Men," better known to us as "The Red Gods," to start this series. We almost never use poetry in GAME NEWS but made an exception here, because the whole series grew out of it. Now we're making another exception to wrap things up. It's a poem called "The Pool Above," and it appears on the following page. It was written by a longtime friend, Day Yeager of Berwick. Day, a bomber pilot during World War II and an outdoor writer for several decades, died unexpectedly in May of 1974. At the time, he was president of Pennsylvania Outdoor Writers Association, an organization he'd served with dedication in various capacities for many years. Some months later, among Day's things his wife Vi came across a copy of "The Pool Above." She sent it to us, hoping we could use it in GAME NEWS. Day might not have been as renowned a writer as Kipling, but he was good and his poem seemed to fit in with what we were trying to do. So we saved it for this issue, feeling this was an appropriate time and place to publish it. We hope you'll take a few minutes to read and think about it. Perhaps you'll feel, as we do, that it shows the way the outdoors—so important to Day and all of us—forms the chain that links everything together, stretching forever, without beginning or end, into eternity.—*Bob Bell*

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The Pool Above

By Day C. Yeager

When I was just a little boy, I used to watch him go
To a fishing spot far up the stream, where most men failed to go.
When he returned, he wore a smile, this man I learned to love
As he recounted of his find—a pool that lay above.

He said that no man could go there and not return to find
A better life among the faults that have beset mankind.
He gained an inner peace within the dark and shady glen
And spiritual growth that made of him the tallest of tall men.

Then, one day, he passed beyond the pool that lay above,
No more to bring his gifts to man of honesty and love.
In sadness, I walked up the stream in hope that I might find
An answer to this life and death that has perplexed mankind.

My thoughts of him took me beyond the pathways made by man
And led me to a shady spot, a dark and lonely glen.
A strange and holy quietness seemed to fill the air,
As though my very presence spelled a doom to creatures there.

A blue jay spoke in whispered tones, a squirrel sped from sight;
A frightened doe nudged her two fawns, and urged them to take flight.
I quietly dropped beneath a pine, and as I settled there
I heeded a compulsion to genuflect in prayer.

When I looked up, my eyes fell on an object near at hand:
A fishing hat with several flies stuck in the sweat-stained band
Was hung with care upon a limb. I knew that I had found
The pool above that he had loved. My heart began to pound.

I placed the hat upon my head, and felt an untold glow;
A newfound strength came over me for I was soon to know
What God had planned in this small glen, where one had learned to love
The creatures here and men beyond, before he went above.

I learned that in the stream of life, each and every man
Must leave life's dull and beaten paths if he would be God's man,
To gain an earthly happiness that comes alone with love
Before he travels life's last mile, to the one last pool above.

As I stood there, the doe came back to stand erect and proud;
The blue jay spun his threads of song that echoed far and loud.
The little squirrel came back to sit upon his favorite seat,
The forest seemed to come alive with breezes, soft and sweet.

A hungry trout rolled merrily, I watch a hatch take birth
As all God's creatures entered in a song to mother earth.
I knew they thought that I was one that they had learned to love,
And vowed that I should live a life like he, who fished above.

I placed the hat where it had hung and promised to return,
Whenever in my heart I found that hate and sin should burn.
I'd speak with God and all his friends 'til here one day I'd sit
Among them all and feel secure I wore a hat that fit.

I'd learn to love my fellow man as one had done before,
Until the day my travels ceased along life's weary shore.
Then I can join the Dad I've lost and share again his love,
As we fish side by side once more in the great pool above.

LAST DAY BUCK

By Ned Smith

TO BE REMEMBERED as something special, a day in the field need not be replete with trophies, full game bags, or other conventional evidence of hunting success. One that I recall more often than any other was a dismal flop in terms of immediate results. Instead of a trophy I got an object lesson. But over the years that lesson has not only added a new element of enjoyment to my deer hunting, but has also turned several unpromising days into winners.

It must have been about twenty-five years ago—the last day of the season—and I was still without a buck. What's more, I entertained so little hope of bagging one at that late date that hunting seemed hardly worth the effort. Perhaps I had grown to expect too much too soon. Through what I now realize was incredible good luck, my newest hunting spot on the south side of Peter's Mountain had produced a splendid 10-point buck on opening day of the very first year. On three subsequent openers I filled out with nice 8-pointers—all before 1 p.m. In addition, I had the opportunity to pass up six or seven small but legal bucks while waiting for Mr. Big.

Convinced that I had unlocked all the secrets of deer hunting, I fully expected another successful opening day that particular year. Pre-season scouting had revealed an abundance of acorns around my stand, and all around the fallen leaves were churned up by feeding deer. The trails were well traveled and at the head of a nearby hollow a couple of red maples as stout as baseball bats were rubbed raw by what must have been bragging-size antlers.

But opening day didn't follow the script. By 11 o'clock the only deer to appear had been three does and fawns. At noon a small 3-pointer came hurrying up the mountainside, but I let him go, still hoping to bag the big one.

Not until mid-afternoon did I see a good buck. Unfortunately, he was bounding up the mountainside far to the right of the usual uphill trail, giving me only infrequent glimpses through openings in the head-high laurel of his jaunty tail and ample rack. Little more could be distinguished, and before a decent shot was offered he had disappeared, headed for the security of the scrub oak on top of the mountain.

That was bad enough, but to my astonishment he returned an hour or so later, apparently pushed out of the scrub oak by hunters. Again he chose an unexpected course, plunging down the slope through trees and brush a hundred yards east of the well-used trail. Through the scope I could see the occasional flash of his antlers, but his brown shoulder seemed constantly shielded by an endless succession of oak trunks. In seconds he was gone, and the noise of his departure had ceased. I sank to my rocky seat, defeated and deflated.

The rest of the season was still worse. Two days of mostly sneaking from place to place, plus another




NED SMITH

Saturday on my lookout while other hunters worked the woods, produced nothing but does, fawns, and a deeper state of hopelessness. While I probably wouldn't have admitted it at the time, I might have been more amply rewarded had I hunted more carefully. But after opening day had come and gone, my confidence had departed also. I was too restless on watch and too careless afoot to expect, or deserve, success. Then to make matters worse a four-inch snowfall turned to freezing rain, glazing everything with a noisy crust of ice for the last day of the season.

Even before crunching to my stand for the last time that year, I knew it was no use. I had never shot a buck after the opening day, had never, in fact, *seen* a buck after the first day. And to think of finding a worthwhile trophy on the *last* day of the season was ridiculous. In the pre-dawn darkness I settled down for the long wait, not really knowing why.

Far across the big hollow the measured tread of distant footsteps marked the progress of a tardy hunter hurrying to his stand. A great horned owl announced the end of night with a muffled phrase of hoots, and ten minutes later a gray squirrel appeared on a limb, silhouetted against the eastern glow, to await full daylight in silence.

The sun was high above Stony Mountain to the southeast before I heard the first meaningful sounds—faint at first, then resolving into the distinct crunch of hoofs in the crusted snow. Minutes later a doe strolled out on the flat below me, nipping off low browse as she advanced. She was followed by two more does and their fawns. Seeing no buck with them I lowered my rifle—too abruptly, it seems, for they saw the movement. For an eternity they stared and stamped their feet, then exploded in a flurry of bouncing tails and flying hoofs. Their snorting and crashing could be heard long after they disappeared up the mountainside. Had it been earlier in the season I'd have berated myself for my carelessness; on the last day it didn't seem to matter.

By 1 p.m. I had taken a nap, seen several more does and fawns, and eaten a thermos of chili. I had also grown tired of my stand, so I stuffed the vacuum bottle and seat pad into the rucksack and picked my way down the mountainside for a change of scenery. The crust was still noisy in places in spite of the softening effect of the sunshine, but by taking advantage of the bare rock ledges that jutted through the snow, reasonably quiet progress was possible.

Rack a Stunner

At the edge of the flat below my stand, the brushy terrain dropped abruptly to another flat. A good spot to check for deer trails, I thought, thinking more in terms of planning next year's hunt than of immediate benefit. I was nearly through the thickest brush at the foot of the slope when a movement on the far side of the flat caught my attention. Even with the naked eye I could see it was a deer, but the scope gave me a better look. What I saw was one of the biggest bucks in the county. His body was deep and heavy, and his rack, clearly outlined against the snowy ledge, was a stunner. It probably sported only the classic 8 points, but its tremendous spread and the length of its tines made an impressive sight as his head tilted this way and that to nip off the twigs on which he was feeding. I couldn't believe it! *Any* buck on the last day of the season was a dream come true; one like this was incredible!

When I finally came back to earth it was with the realization that this super-buck was far from in the bag. About 100 yards well laced with leafy oak brush and saplings separated us, and I couldn't seem to get a clear shot from where I stood. A nearby jumble of rocks offered a better vantage point, but when I attempted to climb them their crusted coating broke with a resounding crash and a tinkle of



AT THE RIFLE'S roar, the great buck simply left the ground and cleared the ledge in a couple of flowing leaps, dropping from sight.

falling fragments. The buck's head went up and for several breathless minutes he stared in my direction while I attempted to balance motionless on one foot. Finally, when I thought I could endure the pose no longer, he waggled his tail and resumed browsing.

Though it initially seemed impossible to get a clear shot, shorten the range, find a rest for my Savage M99, or do anything else to swing the odds slightly in my favor, I did finally locate an opening that seemed reasonably clear of brush. The scope showed the buck still browsing contentedly. It was pretty far for an offhand shot in my stooped position, but I had to try it before he moved away from the opening. The post reticle swung to a point just behind his shoulder and settled there. No problem. The footing was precarious but the sight picture seemed steady, which was surprising in the light of my eagerness to have that buck. "Ease it off," I told myself.

At the rifle's roar the great buck simply left the ground and cleared the ledge in a couple of flowing leaps, dropping from sight on the downhill side. I sprinted to the ledge but he was gone. Half running and half sliding, I followed the tracks down the mountainside and west all the way to the pipeline. No blood, no hair, no drag marks. Nothing but shattered snow crust and churned-up leaves. He had escaped unscathed.

Back where the shot had been fired the answer was obvious. The "clear" shot had splintered two twigs and severed a small sapling, more than enough to cause a miss. Either I had misjudged the bullet's path or my hold had wavered.

Success Still Possible

But the cause of the miss is not really that important. What is important is that the Red Gods had placed a beautiful buck in my sights on the last day of the season, and in doing so taught me that as long as a minute of the hunting season remains there is still an opportunity for success. The experience has become as vital a part of the hunt as my knife and rope. Many times when the season grows old and the chances of meeting up with a buck seem slim, the memory of that scene returns to mind. Once again I see that handsome fellow standing in the sunshine, his wide rack swaying as he feeds, and I take heart. He's the inspiration I need to imagine a buck around the next bend in the trail, to hunt just as diligently, just as carefully, and just as hopefully on the last day as the first.

Does it pay off? You bet it does. On several occasions I've tagged my buck on or near the closing day, a time when I used to think all the bucks had been killed. So far, they haven't been great trophies, but they've given me great hunts. And the satisfaction of bagging one long after the "easy ones have all been shot" makes any last day buck something special.

THE BLIZZARD OF '74

By F. Gilbert Stout

"I'D LOVE to see us get snowed in for a week."

Each year as we set up camp on the Friday before the opening Monday of deer season this familiar sentence is repeated by many of our members; 1974 was no exception. Snow is something we hope for and usually have every year. It not only makes our hunting more interesting but also sets the mood for our week together. For what is better than a deer hunting camp set deep in the woods with plenty of snow on the ground to give you that "away from it all" feeling? Little did we realize how away from it all we soon would be.

Our outfit, the Middle Ridge Sportsmen's Club of Somerset County, is named after a bleak lonely ridge that runs from our farm deep into State Forest Lands. We are fifteen local friends from Broomall, and have been hunting together for over 10 years. We had previously hunted from a rented cottage in this northeast corner of Somerset County, in a little town named Ogletown. Several years ago we were fortunate enough to get some ground to build a cabin. After four years of selling Christmas trees, chances, etc., we had enough money to start construction. We finally finished our modern cabin in October of 1972. It was a solid block structure with fireplace, paneled walls, stall shower and total electric heat. Here were the total comforts of home set a mile in off a dirt road and "away from it all."

The 1972 and 1973 deer seasons were enjoyed as our cabin was perfectly comfortable, though the 1973 season was affected when three of our members had to leave early due to sickness and family problems. The weather was absolutely horrible. For the first time in seven years we had no snow at all, nothing but fog and rain and bad hunting. As 1974 rolled around, our spirits were high for we knew that two years in a row without snow in this area was almost impossible.



WE ALWAYS said we'd like to get snowed in for a week. When it happened, we learned that a cabin with all the modern conveniences can still have problems.

Camp opened on Friday, November 29, when six of us arrived. There was no snow on the ground but we still had faith it would arrive by opening day. The main group arrived on Saturday, and at that time we started to hear forecasts of heavy snow due Saturday night. Eight to 10 inches were predicted. We busied ourselves, some splitting wood, some trying for one more crack at a grouse, others checking out their stands for opening day. George Taylor came in from a walk to his stand Saturday afternoon, angrily stating he had



WITHOUT ELECTRICITY, we couldn't cook indoors, so Paul used a 55-gal. drum to do our 18-lb. roast—and nothing ever tasted better!

found the fresh entrails of a deer no more than 30 feet from his stand. We all felt rather disgusted at the news and knew the local people, many of whom were good friends, would be just as upset as we were, for such actions affect us all.

Meanwhile, the betting was getting hot and heavy as to how big the storm would be.

Sunday morning broke and a quick look out the window indicated that the weatherman had scored another big zero. No snow. Our hopes diminished. Then around noon the flurries started and by midafternoon it was really coming down. My Jeep pickup had no difficulty getting in and out during the afternoon and early evening; however, our last haul into camp ended up with the truck high-centered on the snow. Fortunately, all who were due in had gotten to camp earlier, and by early evening we were settled down to our annual Sunday dinner of charcoal-broiled steaks. As Andy, Jr., and I broiled steaks outside, the storm was in full swing and at least eight inches of snow already covered the ground. Now our thoughts turned to when the snow would stop, for we knew that too much snow would be as difficult for us as no snow at all.

As I settled into my sleeping bag about midnight, the lights went out. Ten minutes later, Stoney, Jim and I were dressed and the three of us set out to check the electric line from the road to our cabin, assuming a tree was down over it. As we walked out we knew this was a bad storm. The snow was well above our calves and still coming down. When we got to the road and looked over to the house of our good friend Dick Shaulis, who keeps an eye on our camp when we're not there, we saw that his yard light was out and we knew the trouble was bigger than we thought. We stopped in at Dick's. He had his Coleman lamp and stove on. He told us that most of Somerset County's electricity was off, but hopefully it wouldn't be too long before power was restored.

Advantages?

As we trudged back to the cabin, Stoney and Jim chuckled at the *advantages* of our total electric camp. Most of the others were out of bed when we got back, anxious to find out what the problem was. A check of our equipment showed we had only two candles but plenty of flashlights. Thankfully, we had installed the largest heatolator we could get for our fireplace, for we were now totally dependent on that for heat. Cooking presented another problem. A firewatch was formed to keep the fire going, and we made space inside to store about one-third cord of wood constantly. The rest of us went back to bed knowing that our oft spoken wish to be snowed in was about to come true.

When Monday morning came, it was snowing harder, as hard as I

have ever seen. By now it was 20 inches deep.

For breakfast we boiled coffee in an iron pot over our fireplace, while Paul, the cook, was outside frying ham and eggs over the 55-gallon drum we normally use for burning trash. Filled with firewood, it was the extent of our cooking facilities.

As each member awoke he was faced with the choice of re-hitting the sack or heading out into a full-fledged blizzard. Those who chose to hunt left a little later than usual. I, myself, became totally engrossed in the rough beauty of this storm. As I slowly maneuvered through the woods I knew my chances were small of seeing any deer. I returned to camp in early afternoon without having seen a track or any other living creature. As usual, man seems to be the last one to get the message. Most of the others had returned. Paul was busy cooking an 18-pound boneless roast over the drum, and Jim and Stoney had walked out to the road to get 10 gallons of fresh drinking water. We were melting snow for wash water. By dinner time, when we sat down to Paul's roast—undoubtedly the best I had ever eaten, and cooked over a trash barrel!—there was at least 30 inches of snow on the ground.

Tuesday dawned with the storm subsided. Our transistor radio had told us of the serious blackout throughout the area. We were among some 50,000 to 60,000 people without electricity. Continuous reports let us know we were in much better shape than many other people in the surrounding areas. We had plenty of food and wood for heat and cooking. Light presented something of a problem; our candles were gone and except for our flashlights and fireplace we were in darkness after the sun set.

Some of the guys attempted to get out hunting early and soon found the going almost impossible. Just trying to get on stand with over 30 inches of snow on the ground was exasperating. We were able to get my truck straightened around and slowly, in four-wheel drive and low range, got it out to Dick's and the main road. The State grader had cleared or leveled the snow at the main road. Andy, Sr., and Stoney headed for the Johnstown area to get any needed supplies. They finally found a Coleman lantern and a two-burner stove which they purchased. When they arrived back at the farm entrance, they decided to leave the truck at Dick's house and walk back in. That was good thinking, as the winds started to kick up and soon the road to camp had drifts of up to five feet in places. The Coleman lamp and stove were welcomed for we now had adequate, constant light and would be able to do most of our cooking indoors.

Bug Leftovers

Jim left Tuesday night and took Bill with him. We were sorry to see them go, but Bill had just gotten over the flu and walking in the deep snow caused the leftovers of the bug to come back.

Wednesday was a beautiful day, bright, sunny, clear and cold. By now we all were anxious to get out and hunt. The snow clung to the trees and even as clear as it was one could see no more than 40 yards into the woods. We attempted several short drives, which moved several deer from the slashings and hemlocks, but no horns were seen. The deer seemed in no hurry. They were quite content to run between the slashings and pines. The going did tire one out quickly. Some of the group went back to camp, others continued hunting.

Meanwhile, those who stayed around camp continued to split firewood, walk out the road for water, etc. Dick had a friend named Cliff who owned a D6 bulldozer and he said he'd get us plowed out as soon as possible. Dick told us that the power companies at this time had no idea as to when power would be

restored. The National Guard had been brought into many areas to help with the disaster.

By now each of us had a path tramped down from the cabin to his own private stump. Tom came in Wednesday evening and reported he'd had a quick shot at a forkhorn but missed. He'd trailed it through the snow, hoping to get another chance, but had to return to camp due to darkness.



WHAT BATHING we managed was via "snow baths"—and they're rather abbreviated when you're wearing thermal underwear!

Chuck showed up at camp late Wednesday afternoon. He had been unable to get away from work until then. We had telephoned him from Dick's on Tuesday and told him not to come, as from the radio reports we'd heard the turnpike was closed in places and we felt he'd have a rough time getting through. In the spirit of a stubborn hunter, Chuck left home Wednesday morning anyway, and as he passed Bedford (all the way on the turnpike) he was starting to doubt our snow story. Only a few inches were on the ground as he came off 220 and headed onto Route 56. However, as he approached Alum Bank he knew we weren't kidding, and by the time he reached the top of the mountain and turned off 56 onto the road to the camp entrance, he couldn't believe his eyes at the amount of snow. He too parked at Dick's and walked back into camp with all his gear and an extra charcoal grill in case we needed it.

As the sun started to set that afternoon, I stood in snow almost to my waist in the middle of a field of 15-year-old Norway spruces, watching the sun settle behind Middle Ridge. I will always remember that scene. I thought how lucky I was to be alone in that field and see the full beauty of nature. It was a moment of true peace.

In Sack Shortly

Another night of good food and companionship followed. We were all in the sack shortly. Thursday saw the arrival of Dan from his other camp in Tioga County. Dan, who has since become the newest member of our club, also left his car at Dick's, whose driveway now looked like the local parking lot. We hauled his gear and more water back into camp on sleds. Dan said they'd had just a little snow in Tioga. He had heard our area was hit hard but couldn't believe the amount of snow we had. He and I took off for the top of Middle Ridge that afternoon. After an exhausting haul to the top, we were amazed to see a number of deer tracks. We even spooked several which evidently had lain there watching us as we climbed to the first bench. Dan and I agreed this would be a good area to hunt on Friday after standing in the early hours.

Friday arrived with the word that Cliff was going to plow us out with his 'dozer. Several members were anxious to get home as they had been able to get only three or four days off from work.

I stood on the ridge overlooking the

main road as the sun rose that day. A deer appeared some 60 yards below me—at the same time I heard Cliff's 'dozer jugging up the road heading for our entrance. The deer continued browsing up the ridge toward me. I looked behind the deer but saw no movement. It worked right up until it was no more than 10 feet away, then stopped and looked at me standing behind my tree. Two little nubs, no more than two inches high, projected between its ears. The little buck jumped once to my right and continued its browsing walk on up behind me. I hoped we'd get together at the same spot next year.

By the time I got back to camp Cliff had plowed out the road. Andy, Jr., Jack, Mugsy and Chuck had left. I think their main concern was a hot shower. A few of the others and I relied on snow baths, but I've got to admit they're no great fun. Lo and behold, as I entered the cabin I smelled fresh perked coffee and the lights were on! Electricity had returned at 12 noon, and with it the comforts again. Saturday saw some more of the fellows depart. By Saturday evening only Stoney, Tom, Dan and I remained. We'd hunted the day. It was cloudy, bleak and cold, and we saw nothing, not even many fresh tracks. At dinner, we looked back over the week's events and laughed.

We cleaned camp, packed our gear and prepared to leave Sunday morning. We stopped at Dick's to say goodbye and headed down the road on a beautiful bright and sunny day.

None of us tagged a deer in 1974. In fact, some of us hardly hunted at all. That didn't matter. Our camp usually does not bag many deer a season, but our reason for hunting is not merely the challenge and hope of nailing a buck. It's much deeper than that. It's a love. A love of the outdoors, a love of being away from it all and perhaps most important of all, love for the opportunity for all of us to get together once each year to enjoy fellowship with one another. And this year particularly will be remembered because 15 men had lived, hunted, laughed and enjoyed good cheer for a week with nothing more than the barest necessities. Yes, we had survived the blizzard of '74.

Books in Brief . . .

(Order from publisher, not from Game Commission)

Crockery Game Cooking, by Joan Cone, PO Box 2993, Williamsburg, Va. 23185, 16 pp. paperbound, $1. Tested recipes for preparing both big game and small game in the new electric slow-cooking pots.

Stoeger Publishing Co., 55 Ruta Court, South Hackensack, N.J. 07606, has long been known for their big annual gun book, **Shooter's Bible.** They also publish large-format paperbound books on guns and hunting, and reprint in 6x9 paperback, as their "Sportsman's Library" items, books on these subjects which have appeared in hardcover from other publishers. The following titles fall in these categories. All are available from Stoeger.

Pistol & Revolver Guide, 3rd ed., by George C. Nonte, Jr., 219 pp., $6.95. A general history of the handgun, advice on selection for sport hunting, target shooting, self defense, etc., advice on maintenance and good information on reloading and alterations.

Reloader's Guide, 3rd ed., by R. A. Steindler, 223 pp., $6.95. Everything you have to know about assembling safe, dependable ammunition for rifles and handguns, plus basics on shotshell loading. Goes into bullet casting and swaging, reloading problems, record keeping, etc.


—DOUG PIFER

DEUCES WILD

By Calvin J. Klein

1971

IT WAS during the 1971 deer season that I first heard about the two big bucks. At the time, I was alone, still-hunting along the edge of a railroad embankment, carefully scrutinizing a stretch of marshy woodland below me. I was carrying my single shot, 12-gauge shotgun loaded with buckshot, for I was hunting in that part of Montgomery County which falls within the special regulations (buckshot) area.

Unfortunately, the movement I spotted among the trees below me wasn't a buck—it was a shotgun-toting hunter crashing loudly through the brush. The reason for his noise soon became apparent when I saw a second hunter emerge from behind a large oak tree and join the first, who was now only a few yards away. Obviously, the first man was driving the swamp for the second.

As they stood conversing, the thought occurred to me that three hunters might better be able to conduct a drive than two, so I made my way down from the embankment and joined them. Introductions all around, followed by a brief chat, resulted in the desired linkup. Shortly I found myself positioned by a lone white pine in the center of an overgrown meadow. The hunter who had been driving for his partner minutes before was now on stand along a fencerow about 200 yards to my left, and the former stander was now working his way through a thicket to the north of us in an attempt to push some whitetails our way. The effort would be "do or die" for me, for it was only minutes until the end of the shooting day and, due to my employment arrangement at the time, this would be the only day I'd get to hunt deer in 1971. Actually, less than half a day was more like it, for I hadn't hit the field until after 2 due to morning chores at the office.

As fate would have it, I was in for an action-packed and informative, yet disappointing, hunt. For, as I looked in the direction of the driver, I suddenly saw three deer madly pounding across the field toward me. In the lead was a nice buck with two spikes at least six inches in length. As he approached almost head-on in a series of high-arching bounds, I rapidly aimed and fired.

The buck veered to my left, then abruptly stopped, no more than 15 yards away, standing broadside. Wildly, I fumbled in my shooting vest for another shell, all the while cursing my single-shot shotgun. But my efforts were to no avail because, by the time I reloaded, the buck had vanished into the nearby brush. After carefully looking over the area for signs of blood or a downed deer, I was sure that I hadn't wounded the animal. Then I made for the rapidly approaching driver, while the other stander also headed our way.

No Meat In Pot

Describing the missed opportunity to my two newly acquired companions made for an interesting story, but, unfortunately, it put no meat in the pot. Nevertheless, I had to admit that everything added up to a very exciting time for the only half day of the season I was free to hunt. And, disappointed as I was, I had learned a few things for future reference. First off, I was introduced to a new woodlot in which to hunt. Secondly, I made a mental note of the locations of a few well-worn deer trails and accompanying stands. Additionally, I vowed never again to find myself out there with a single-shot shotgun, because I was convinced that, had I had

another quick shot, the buck would have been mine when he froze after my initial miss.

There were also to be two final teaching points I hadn't reckoned on —both in the form of advice from my temporary companions. Number one was the reason we had driven this particular area. Two big-antlered bucks, one described as a "real monster," had occasionally been sighted there. Secondly, the two animals also had been sighted in a small woodlot to the south of where we were then conversing. None of the sightings, however, had taken place during the deer hunting season. I made mental notes of all of these points, because 1972 would be another year and possibly my luck would change!

1972

I hunted deer every chance I got in the same special regulations (buckshot) area during the 1972 season. Because I had changed jobs by then, I had most Saturdays free, as well as a weekday afternoon now and then. Keeping in mind some of my errors from the prior season, I was now armed with a double-barrel shotgun, although I had dropped down to a 20-gauge. I wanted less weight because of some recent neck and back problems. Also, I concentrated most of my hunting efforts in the two woodlots I had learned about in 1971 —the one the spike buck had come from and the one I hadn't hunted but in which, I was told, the two big bucks had also been sighted.

The only thing I lacked during 1972's frequent forays was a companion or so to help in a drive. Try as I did, I couldn't convince any deer hunting buddies of the potential of the special buckshot area. All had their minds set on the big woods counties off to the north or west of Montgomery and they went their own ways. Quite possibly, had I succeeded in organizing some drives, my chances would have improved. I say this because I saw numerous whitetails outside of buckshot range, but careful as I was, whether on stand or still-hunting, I couldn't get close enough for an effective shot. My only consolation was that I was learning more and more about the habits, reactions and escape patterns of the deer in the vicinity.

Additionally, I picked up some valuable information confirming the presence in the area of the two bucks I had heard about the year before. One tidbit came on the first Saturday of buck season when I ran into another lone hunter about to leave the area as I was arriving. He stated that on the opening day of the season, the prior Monday, he was working on a surveying crew half way between both woodlots. At the time, he had no intention of looking for deer and was unarmed. At about 8 a.m. he and the other crew members neared a small stand of spruce trees, when out from among the evergreens appeared five deer, including two bucks. One of the latter was described as having a "magnificent rack." It was the sight of these deer which lured the man back to the area with his shotgun.

Eventually the antlered-deer season was over, but I was back and forth between both woodlots with my Montgomery County antlerless license during the days following. This gave me no small chance, for in the special buckshot area one has a full week, as opposed to the usual two days elsewhere in the state, during which to bag a doe. Furthermore, one may take a doe anytime during the buck season in this locale, provided he possess the required antlerless license. Such liberal regulations represent a well reasoned attempt to cut down the size of the deer herd in this rapidly urbanizing corner of Pennsylvania, where highway kills are a frequent occurrence.

Finally, there it was—the last day of the 1972 antlerless season. And there I was, at first light, making my way slowly through the larger of the two woodlots. Though I saw fleeing whitetails on at least two occasions,

that was about all I had to show for the day by the noon hour.

While pausing on a comfortable stump for an hour or so to eat my lunch and rest a bit, I was approached by two shotgun-carrying hunters. They turned out to be a man and his wife and, after a brief chat and at my urging, we decided to team up for a few drives. Although it was too late to bag a big buck, a fat doe for table fare would certainly be nice.

We decided upon two standers and one driver for any particular pass through an area. After thoroughly but fruitlessly covering several spots near the railroad embankment I had hunted along in 1971, we came to the smaller of the woodlots where the two big bucks had been seen in the past—woodlot number two, as I called it. For this drive, the prettier half of my two newfound hunting partners and I were designated as standers, while the woman's husband was to be the driver. She and I positioned ourselves about 50 yards apart at the west end of the woodlot, while our driver made a wide half circle through a nearby field in order to enter the woodlot from the east.

I was on my stand no more than five minutes when it happened. Running down through the woodlot to the far side of my fellow stander came a beautiful, sleek buck. The distance was too great for me to count the points on his antlers and, as it later developed, the pretty stander was too excited to do so. Not nearly so excited, however, as her rapidly approaching husband. He claimed that, while a 5-pointer had headed our way, a tremendous buck with almost twice that number of glistening white points had bounded east out of the woodlot.

The bucks had jumped up side by side no more than 20 yards from our driver when he first entered the woodlot. Initially, both of the animals stood staring at him before bolting in opposite directions. Needless to say, both deer had been in dead range as they stood looking at the driver,



MIKE FOLLMER, left, and the author with the fine trophy bucks they collected in the buckshot area of Montgomery County after a hunt that lasted years.

just as the smaller of the bucks was when he ran by my fellow stander. Nevertheless, it was no longer buck season, so no one could take advantage of the situation.

It was on that note that my deer hunting in 1972 came to an end. In terms of bagging my animal, I was obviously unsuccessful. But with respect to learning a bit more, being afield in some beautiful weather and, most importantly, firing my determination to bag one of that pair of elusive bucks, everything was just fine. After all, I had at least been able to personally see one of that much-discussed duo and, to me, that represented real progress.

1973

Monday, November 26—opening day of the 1973 buck season and a day I'll never forget! To begin with, it was the first time I was able to hunt on opening day in many years. Secondly, due to changing residences the previous March, I had acquired a deer hunting neighbor, Mike Follmer, whom I succeeded in convincing of the virtues of hunting in the special buckshot area of Montgomery County. Thus, for the first time since I began pursuing deer in that area, I had someone to organize drives with.

Because I was familiar with the

terrain and habits of the deer in both woodlots, due to two seasons of intensive hunting in them, I felt I was in an excellent position to work out a sound strategy for moving the animals to our advantage. Since I had visual evidence that both of the big bucks were alive and well as of the last day of the prior year's deer gunning season, I believed the chances were excellent that they were still around. Perhaps the only sour note was my shotgun—due to repairs being made on my 20-gauge double barrel, I was back with my 12-gauge single shot from two years before.

Woodlot Number Two

Nevertheless, I felt optimistic about our chances. That this optimism was not unfounded became apparent when, at approximately 11 a.m., Mike and I found ourselves approaching woodlot number two. We already had scoured woodlot number one to the north, as well as several other areas, starting at daybreak. We had observed no deer whatsoever, although there was plenty of fresh sign.

As we carefully made our way along the western edge of the woodlot, we noticed what appeared to be relatively fresh deer tracks heading easterly into the heavy cover. Surmising that our quarry might still be in the vicinity, we quickly decided upon a plan of action. Mike would stand by a brush-covered wire fence about 100 yards across a grassy stretch from the southwest corner of the woodlot. This was near the place where I had observed the smaller of the two bucks in 1973, the only difference being that I was in the woodlot itself rather than outside of it. Now, as the driver, I would start into the woodlot from the northwestern corner and continue along the northern edge. We hoped that any deer in the area would move toward the south and then double back in a westerly direction past Mike, rather than moving east and out of the uncovered end of the woodlot. This game plan differed from the drive of the previous season, when two standers were situated while the driver circled around and entered from the east. The biggest buck ran east that time, the other west.

I had gone no more than the length of a football field, alternately creeping and standing, while carefully scanning the woods to my right, when something white caught my eye. A closer look revealed a pair of massive gleaming white antlers showing through the trees. There could be no doubt—this was the big phantom-like buck I had heard so much about but never seen!

The distance, about 100 yards, prevented an accurate count of points, but I reasoned at anywhere from 8 on. Because the big deer was staring head on at me from my front right and looked as if ready to bolt, I had to think fast. With the animal clearly out of buckshot range and apt to head out the east end of the woodlot, I felt it best to turn about and rapidly retrace my steps.

Once out of the woodlot, I returned to Mike and explained the situation. We both agreed that, had I continued to move forward in the woodlot with the big buck watching, he surely would have moved out through the far end of the cover. The question now was, had he done so after I left the woodlot and, if not, what should our next move be?

Close to Corner

Hoping the buck was still in the vicinity, Mike decided to stand a bit closer to the corner of the woodlot while I headed back along the northern edge of the cover. The gamble was that the buck might have slipped closer to our end of the woodlot, rather than out the far end.

When I reached the spot where I'd first seen the buck, he was nowhere to be found. Thinking he must have moved east, I headed cautiously forward. After only a few paces, I suddenly detected movement to my front right. There, at a distance of no more than 50 yards, a big buck was quietly sneaking easterly toward the far end

of the woodlot. As the deer moved, its gaze was fixed upon me. I knew it was now or never. Quickly, I aimed and fired. At the sound of my gun, the deer collapsed.

The monster buck had met his end —or had he? As I ran toward my prize, movement beyond him caught my eye. I gasped in astonishment, for there among the trees flashed the huge, white antlers I had seen on my first trip into the woodlot. No doubt about it—this was *the* biggest of the elusive duo. He was accompanied by a doe, and the two of them were running through thick brush in the general direction of Mike.

Suddenly, I realized what had occurred. This was the buck I had seen on my first trip into the woodlot. By the time I began my second drive, however, he had moved back into thicker cover and I saw his smaller partner. Not having a completely clear view of junior's antlers, I naturally assumed I was shooting at "Mr. Big," but I was wrong! Now, it quickly became a matter of getting Mike his chance.

After running a short distance, the big buck and the doe stopped. They looked my way, seeming reluctant to continue on. Nevertheless, as I worked closer, they began to move on--the doe out in front. They paused again, but I continued to press them—all the while keeping Mike's position in mind. Finally, they both cleared a large, fallen tree and were gone. All I could do was return to my deer, while listening for a shot. It came within four seconds—a solitary *bang!* I kept my fingers crossed for my hunting buddy Mike.

My "little" buck proved to be a fine, fat 6-pointer, with a nice spread. After field-dressing and tagging the animal, I threw my hunting jacket over him as an added sign of possession and then hurried off to find Mike.

He was all smiles when I found him. At his feet lay the monster with the gleaming white antlers—all 10 points of them! He was a real beauty, and all we did for a time was stand and admire him.

We estimated the dressed weight of Mike's deer at 150-160 pounds, some 20 or 30 pounds heavier than mine. The taxidermist later told us the big buck was 5½ years old.

Mike said that as he stood at his stand after hearing my shot, the doe ran up within a dozen steps of him. Then, seeing him, it quickly retreated. Next came the monster buck—also to about the same distance. One shot put him down instantly.

Persistence and Knowledge

After dragging the bucks to a nearby dirt road, I went for my car and, a short time later, the animals were side by side in the trunk. I couldn't help but think how they were together now just as they had been for years. There would be no more rumors and sightings of the two. It was all over, and in some ways I felt sorry. Nevertheless, the whole episode certainly demonstrated the value of persistence, and knowledge of terrain and the habits of your quarry, as the keys to successful deer hunting.

Something else about this entire affair had me thinking. I'm not superstitious, nor do I believe in lucky numbers and such, but I couldn't help but connect all that had transpired with the number two. It was two years previously that I had first heard of the two deer. They were always seen, or rumored to be, in the vicinity of two separate woodlots—the ones I referred to as woodlots one and two. Furthermore, I made two trips into woodlot number two before Mike and I finally scored. And it took only two shots in total for the two of us to succeed.

Of course, there could be a negative side to all of this. For, while the taxidermist said that the mounted heads would be ready in twelve to eighteen months, it could well turn out to take two years! That's a long time to wait before finally putting the two trophies in the dens of our twin homes—built side by side here in Philadelphia.

For Whitetails, the Handgun is . . .

A REAL CHALLENGE

By Howard J. Mortimer



ONE OF THE added benefits of handgun hunting is the ease with which binoculars can be handled without a heavy rifle slung across your shoulder.

"I THINK I'M just about done with deer hunting. I just can't seem to get interested any more."

I might as well have hit Dad between the eyes with my rifle butt. For twenty years he had been raising a son, teaching him everything he knew and loved about hunting and hoping I would share his love for the sport. He had started me out before I was old enough to go to school. He took me along every chance he had, and I carried his rabbits or sat with him to watch for deer. He taught me how to find good rabbit cover, what to look for in a squirrel woods, and how to tell which way the deer would be running. When I finally reached the magic age of 12, I started to hunt beside him, proud as a flea on a new dog. The first year I used a shotgun with "punkin balls," and the next year I graduated to my very own rifle, a bolt action 257 Roberts. I was really hooked.

Now, just nine years after I had bought my first license, I had lost interest in hunting—at least in hunting deer.

"It's just too mechanical," I said. "In the last six years I've taken six bucks. In the beginning when I was using punkin balls, there was a real challenge. Even when I started with my rifle, it wasn't so easy. When I put that scope on, things started going downhill."

He was beginning to see what I meant. In six years I had fired six shells and had taken six bucks. Everyone said I was lucky, but that kind of luck was taking the fun out of hunting for me. I had sat on the same crossing for the last six years and by noon each year my buck had come along—usually walking slowly and never more than 60 yards away. It was simply a matter of finding him in the scope and squeezing the trigger. The 117-grain Sierra would easily do the rest. But there had to be more to hunting deer than that.

Finally, about September of the following year. I hit upon the idea of using a handgun for deer. Certainly it would be challenging, for I would

have to get close to the deer before I could shoot, and shooting with any real accuracy would be much more difficult. I looked over, handled, and shot a number of revolvers. I went first to a Ruger single action 44 Magnum. I wanted to be able to make a clean kill, so I looked for all the firepower I could find. But the time I had burned up a box of ammunition, I was sure the 44 was too much gun for a beginner. I found myself anticipating the recoil, and by the time I had fired 30 shells, I couldn't hit even a two-foot target consistently. I finally settled on a Colt double action 357 Magnum. The recoil was tolerable, the ballistics were still good, and the gun had a good "feel" as I shot it. Since I had no experience in loading handgun cartridges, I decided I would stick to factory loads for the first year.

Renewed Vigor

When that first day finally arrived, I was filled with renewed vigor and anticipation. By the time I reached my crossing I knew I was going to like hunting with a handgun. The long hike was much more pleasant without a heavy rifle to carry. I had both hands free, and I loved it. It was a strange feeling when the first group of deer came along and I had no scope to look through. I strained to see and that added to the excitement. By 9:30 I saw my first buck—and that's when I found out how much I had to learn.

He was a small spike, and he stood only 30 yards away. I had no idea where he came from, but all at once he was there. I eased my gun from its holster and raised it slowly. This would be easy, I thought. He stood broadside to me, unaware of my presence. I looked across the sights, but the end of the barrel was making circles around the deer. By moving six inches to the right I was able to rest against a knob on the side of a big locust. I cupped my left hand tightly over my right. The gun was steady. Quietly, I cocked the hammer, aimed and squeezed the trigger. The gun roared. When I saw the buck again, he was nothing more than a huge white tail disappearing into the hemlocks.

I chalked the miss up to inexperience and waited for another chance, but it didn't come. I hunted the rest of the season, but I never got another decent shot. I had broken a perfect string, and I took a lot of ribbing about it from my friends. But missing the deer didn't really bother me as much as why I had missed him. I was sure it had to be because I hadn't lined up the sights. I had placed the front sight squarely on the deer, but since I had no stock to rest my cheek against, I had never brought the rear sight up to place. I was looking right over it. That was a problem I was sure I could cure with a little practice.

The following spring I started loading my own ammunition. I had loaded rifle and shotgun shells for many years, so switching to handgun cartridges came easily. I tried various loads from several loading manuals. I wanted one that combined speed, accuracy, and a margin of safety. I had never liked those "hot loads" that were near maximum pressures. Finally I found two that were fast enough, accurate in my gun, and safe to shoot. With my Remington brass

SERIOUS PRACTICE before the season opens, plus a solid rest when a shot finally presents itself, make for good results in the deer woods.





HOWARD MORTIMER with his big "handgun buck" and the Colt 357 Magnum revolver that made hunting interesting again.

I used a CCI 500 primer, 14 grains of 2400 powder, and a Remington 158-grain soft point bullet. In the Winchester brass I used a CCI 550 primer, 16 grains of 2400 powder and a Speer 146-grain hollow point bullet. The loads were straight out of my Speer No. 7 manual and they were the best I found. The heavier bullets had a muzzle velocity of 1265 feet per second, while the lighter hollow points traveled at 1436 feet per second. Penetration was good. At 50 yards I could shoot through 5½ inchs of pine board. I was also satisfied with the accuracy of both loads in my gun. Now it was up to me.

I started out shooting at least 100 cartridges each week, but after about six weeks, I cut back to 200 rounds each month. During October and November I upped my shooting to 500 rounds a month. When buck season arrived, I felt I was ready. I was familiar with my gun and I could handle it competently. I could place my shots in a 6-inch circle at 50 yards with good consistency. I knew any good target shooter could beat that, but I felt for hunting deer the magic 6-inch circle was all I needed to hit.

Stampede!

On the first day of the season I got my chance, just as I had every year for the past seven. The day was cold and there was no snow. Dry, crisp leaves crackled underfoot. All morning I was able to hear deer coming long before they got to me. Finally, about 11:30, I heard what sounded like a stampede. When the first doe stuck her head out from behind a scrub hemlock, I had my handgun drawn and I was ready. I watched motionlessly as eight does paraded one at a time across the little clearing in front of me. They were walking slowly; they didn't know I was there. Then the ninth deer stepped out of the hemlock. He was an 8-point, and he was following the doe cautiously, alertly. The slight click as I cocked the hammer stopped him in his tracks. He stood upright, staring directly at me. I lowered the sight to that magic 6-inch circle and squeezed the trigger. I didn't feel the recoil or hear the noise. The buck jumped two feet straight up. When he came down, he was running. He took two long leaps and fell. My bullet had penetrated the chest. I couldn't have done better with a rifle. He wasn't the biggest buck in the woods, but he was a trophy I was truly proud of.

Since then I have taken four other deer with my handgun. Each one has given me a real sense of accomplishment because each one was a real challenge. No, there's nothing mechanical about using a handgun for whitetails.

Big Little Guys

The white stork is so tall that when the young are two feet high, they are still babies and need their parents' care.

Get Your Geese in the Southeast!

By Chuck Fergus
GAME NEWS Staff Writer

WHEN PEOPLE and wildlife crowd together, problems usually arise. Such is the case in southeastern Pennsylvania's Delaware, Chester, Montgomery and Bucks counties. Here, concentrations of Canada geese have adapted well to the suburban environment—all too well, according to many residents.

Why have the geese ganged up on these southeastern farms and suburbs? Probably because the area offers ideal habitat to members of a species whose numbers are on the rise. While Canada geese have always frequented the area—it lies on the Atlantic Flyway used annually by hundreds of thousands of migratory waterfowl—never before have they stayed here in such large numbers. Also a series of warm winters in the area have made geese loathe to move south to the more heavily hunted Chesapeake Bay region. Finally, entire townships, large private holdings and public watersheds are closed to shooting in the southeastern counties. With little hunting pressure, plenty of food and mild winters, geese have little reason to fly south.

It's only natural for wildlife to eat, sleep, fly and rest where they feel secure. But add these natural goose habits to an area highly populated by humans, and the problems start. Golf courses overrun with geese—their droppings fouling the greens—surmised pollution of local water supplies and swimming pools and crop damage are a few of the annoyances.

Hunting geese reduces local populations and disperses flocks. Granted, hunting pressure can't become very intense in an area having a lot of posted land, but even limited gunning may make some geese head south for the Chesapeake, which can better support large numbers of these honkers.

Hunting for geese will be permitted in January, 1976, under regulations made by the Pennsylvania Game Commission within guidelines set up by the Fish & Wildlife Service, U.S. Department of the Interior. While many local waterfowlers head for their usual haunts, Maryland and Delaware, they may be passing up good goose shooting at home in the southeast. At present, the bag limit is three geese per day with a six-goose possession limit. Waterfowlers must possess a current Pennsylvania hunting license and a migratory waterfowl stamp, and must adhere to shooting hours listed in the PGC's Digest of Hunting and Trapping Regulations.

If you think you'd enjoy hunting Canada geese, you may wish to pursue the sport in the four southeastern counties. In this area, geese will usually be hunted in fields rather than over water. As does hunting over water, good field shooting requires using decoys. Decoys may be either full-body or silhouette style. Silhouettes are simply profiles of geese made from stiff material and painted with matte (non-glossy) paint in the black, white and gray pattern of a Canada goose. You can buy silhouettes or make them from wood, fiberboard or even heavy cardboard. Use two types of decoys—feeders and watchers. (Feeders have their heads to the ground, while watchers' heads are erect.) Experts recommend at least two watchers for every five or six feeding goose decoys. Geese land and feed into the wind, so decoys should generally quarter into the wind. This way they're in a natural feeding position and present profiles to decoying birds, which will



SOUTHEASTERN Pennsylvania offers large areas of ideal habitat for Canada geese, and these great birds have become the goal of many hunters.

wheel toward the silhouettes.

Hunters should conceal themselves in some kind of blind. Most people picture an intricate, well-camouflaged pit when they hear the word "blind," but a much more rudimentary setup can also be effective. A strip of standing corn, a shallow pit covered with canvas of the proper color, a downed limb with dead leaves still attached, or a sheet of burlap wrapped around four short stakes driven into the ground—if used properly, all of these give concealment to a hunter. Perhaps the simplest blind is a piece of burlap (which may be tie-dyed in a stippled camouflage pattern) that a hunter can drape over himself like a blanket. A light-colored hand or face is a dead giveaway, so hunters may wish to darken their faces or wear gloves and camouflage masks.

Don't locate your blind too near a woodlot, barn, house, treeline or fencerow—in short, keep away from obstructions like these, as geese won't land nearby.

No matter what type of blind you decide to use or construct, first get the landowner's permission to hunt. If he allows you to dig a pit blind, let him know exactly where it will be and fill it in when you're done hunting.

Generally, it's best to hunt alone or with only one other partner. The more people who hunt geese together, the more likely one will be detected; geese are tremendously wary birds, with exceptional hearing, acute vision, and what seems to be a built-in intuition for avoiding hunters.

To hunt honkers effectively, study their feeding and flying habits. Geese generally move in patterns to feed. They leave the water—be it a river, pond, lake, impoundment or whatever—about dawn and feed for two or three hours. Then they return to the water to loaf and rest away the daylight hours. Again in the evening, they fly out to feed. On both morning and evening forays they generally fly about five or six miles to food sources (this may vary from flights of a few hundred yards to over 20 miles).

Canada geese are essentially "grazing birds" and are more land-based than ducks. Their diet includes pasture grasses, sedge, barley, green winter wheat and corn left in fields by mechanical harvesting equipment. They eat insects where available. Geese may feed at night during periods when the weather is clear and a full moon is shining; this disrupts normal flight patterns, as they then do not leave the water during the day.

Find the Fields

Find the fields where geese are feeding. Use binoculars to watch flights leave the water, keep your eyes on them as long as possible and then drive to the point you last saw them. Other flocks will follow the first, allowing you to pinpoint areas and then exact fields where geese are feeding; simply slip into the area around midday or before sun-up, get your decoys out and wait—properly concealed—until the flights return. Don't overhunt any one field, or the geese won't come back to that spot;

get permission to hunt three or four good places and rotate from one to another.

Calls, properly used, will help to bring in geese, but unless you're good with one you should let the decoys do the luring. Don't call when geese are coming in to the decoys. Once they've set their wings and begun gliding in, you've duped them. Don't move a muscle! Let them get into proper shooting range before shouldering your shotgun. Geese are much bigger birds than ducks, so don't talk yourself into believing they're closer than they actually are. Wait until you see the white cheek patch distinctly. At this point, a honker is just getting into range. Many experts say that when you can see one's eye, you can kill it. Your bead front sight will look approximately the same size as the bulk of the goose when you finally take your shot; remember to lead your target.

Don't Skybust!

Pass shooting is another method of hunting geese. Find a rise in the terrain where geese fly past on their way to food. Again, proper concealment is a must. If they're actually landing nearby, resist the urge to shoot and let the first few gaggles pass. They will land and begin feeding, providing natural decoys for the birds which follow; also, late-comers will tend to fly much lower as they follow the first flocks. Fog, wind and snow—if they don't completely ground geese—improve pass shooting opportunities, as they force the birds to fly lower. Successful pass shooting under bright clear skies is so hard it's almost impossible. Again, skybusting is out; make sure your targets are well within shotgun range. Taking good close shots—and showing the patience and good sense to pass up questionable or long shots—means fewer cripples and more geese in the bag.

HUNTERS
Stay Out Of
Unharvested
Fields!

Experts recommend using loads containing a minimum of 1¼ oz. of number 5 or 6 shot, and preferably 1⅛ oz. or more of 4s or 5s. Most waterfowl gunners prefer shotguns choked full—especially for pass shooting—but you can use more open chokes for birds descending to decoys. Again, let the birds get close and pick your shots wisely.

The Canada goose is one of our most successful waterfowl species. It has long maintained a stable population, because geese are widely distributed over the country and nest in the far north where man has not yet interfered with the environment as much as in other regions. Also, honkers adjust fairly well to humans and civilization—witness the thousands of geese in southeastern Pennsylvania.

If the winters are mild in the southeast, many birds will probably remain in the area and provide good hunting. Bad weather, on the other hand, will drive geese south. But no matter what the weather is this year, geese will continue to return to Delaware, Chester, Montgomery and Bucks counties. They will provide recreation and enjoyment for many of our state's citizens, although hand in hand with these benefits will come problems. Hunting in a safe, sane manner can be used as a tool of game management to minimize these problems.



3 FOR 3!

By George H. Block, III

MY HEAD turned slowly to the left before the image registered. That black spot across the little gully was a nose, a shiny black nose. I looked carefully and sure enough, there it was, not 30 yards away behind the top of a fallen locust tree, a nose staring at me. Now that sounds like a stupid statement, but if that nose wasn't staring at me, the two eyes right over it were. And right there above the eyes was a respectable set of antlers mixed in with the top limbs of the tree.

How in the world did he get there, and how long had he been staring at me? These were important questions. If he'd just arrived, he probably wasn't sure I was there, for I hadn't moved for a while. Well, in a situation like that there was only one thing to do: stare back. If I so much as raised my bow, he'd be long gone. I'd worked too hard for this moment to blow it now, so I just sat there, afraid even to blink, my heart pounding, my throat dry. Between me and that beautiful nose was as nice a deer trail as there is in Washington County. Actually, it's a spot where three good trails come together. Behind me and to my right was a nightmare jungle of hawthorn, poison ivy and crabapple. Now, if I could outwait him and if he stepped onto one of the trails, I'd have a beautiful shot. If . . .

I glanced at my watch, which I'd laid in the leaves beside me, and guessed we'd been eyeballing each other for a full 10 minutes. His tail twitched slowly from side to side; I knew he might be nervous, but he wasn't sure what I was, and wouldn't leave until he had investigated. When Mr. Nose finally decided to move, I could hardly believe his size. He looked huge in the lengthening shadows as he moved to my right. Slowly he picked a path away from the fallen tree and I turned, raised my bow to a half draw, and got ready. Oh, the pains of bow hunting! As he moved across the semi-clearing to my right, he seemed to keep every stick and briar between me and him. Finally, he stopped and looked the other way.

I drew my bow and aimed, but there was a small tree in front of his shoulder and to make a bad shot on such a magnificent animal would be a disgrace. I held my draw and waited. Darned if he didn't move over into the jungle below me and come right at me, slowly picking his way. When he got about 10 yards away, he stopped, looked at me and tested the wind. It was now or never, I thought. I held for the white spot on his throat and released—and my arrow hit a crabapple limb five yards in front of me . . .

Deer Hunter

I'm George Block, deer hunter. Some people are bowlers, golfers, drinkers, or a million other things. Me, I'm just a deer hunter. I live in a little town in Washington County with the strange name of Eighty Four. I'm fortunate in many ways. I live in a state with a great deer population. I live in an area that doesn't have the harvest of the real deer counties, but what deer we have average much larger than their northern cousins. Finally, I live with a family that loves hunting. When deer season opens, bow or rifle, we all become glassy-eyed and shiftless. The work around the house gets neglected, the car stays unwashed and the dishes undone. My wife Eileen loves to be out in the

woods, and my son Patrick, who's 15, is getting more like his dad every year. And my beautiful daughter Kathy keeps the coffee hot for us at home when we straggle in half-frozen and in need of encouragement.

The archery season opened with the Blocks anxious to get out. Patrick and I had done some pre-season scouting and knew a large buck was using the area mentioned at the start of this story. All season long we had taken turns sitting in one of two natural blinds close to where the three trails came together. And all season long, things went wrong. I'd see only does, or we'd hear deer walking like unseen phantoms. The wind would shift and the deer would snort, hightailing it out of there before we could see them. I didn't see "Mr. Big" until the last evening of the season, when I killed the crabapple limb. Such are the frustrations of hunting.

When I got home that night, I was feeling pretty darn good. For me in bow season, success lies not in getting a deer but just in getting a shot. My wife pulled my leg and my son complained. He'd waited there all those hours without seeing anything with horns, and the one night he didn't go I'd seen a big buck. Jokingly I told them, "That deer made a fool out of me. He teased me and just plain outsmarted me. But one thing I can tell you, I swear on the blood of my ancestors that before rifle season is over I'll nail his head on my wall." That broke everyone up, and we all had a good laugh.



SOME PEOPLE are bowlers, golfers, drinkers or whatever. George Block thinks of himself as a deer hunter, and year after year he gets the proof.

This Year Different

Rifle season found me hunting with my wife, my son and my good friend Ed Haley of Pittsburgh. In the past, both Ed and I had been pretty successful on deer and had decided to stay in Washington County and hunt for trophy racks. We weren't sure we could hold to our plan, but we were going to try. Two years before, I'd taken a good 10-point, and last year, after passing up two small bucks, shot what I thought was a good one only to find he had but one antler. This year would be different, or so we hoped.

All four of us hunted hard the first two days, but all we saw were does; on the third day, Pat had to go back to school. My wife decided she had better wash my clothes that Wednesday or I'd chase every other hunter and deer out of Washington County, and then she couldn't hunt either. Well, those are the disadvantages of being a wife and a student. That left Ed and myself to track down our quarry.

A favorite way Ed and I hunt my home grounds of mixed woods, fields and briars is to take turns posting and moving. One fellow posts a crossing and the other hunts toward his partner. This method has been very successful for us, and we tried it again Wednesday morning. On one fruitless walk, Ed found some very large prints in a muddy area and called me over. We conferred for a while and made

our plans. The tracks seemed to be headed for a wooded section about 500 yards long by 100 yards wide, and Ed would post the far side.

In the leaves the tracks weren't visible, so it was half guesswork and half intuition that told me where the deer was headed. After waiting 10 minutes for Ed to work his way around to the other side, I started through. I walked slowly, scanning every shadow ahead for about 50 yards. When I saw a large clear print in a bare spot I knew I'd guessed right. In a situation like this, my nerves are keyed to a high pitch. I'm expecting to see deer or hear a shot at any moment.

I'd worked almost to the end of the woods when I saw the sun shining on something ahead of me. I knelt down, raised my 25-06 and looked through the scope. It was the buck. I could see antlers extending beyond his ears and knew he was a good one. Hitting him behind his shoulder with that 100-grain Remington slug was easy, but keeping him down was something else. As he raced across an open field I sent a shot through his spine, putting him down for good. That put an end to my season.

Same Shiny Nose

Was I shocked when I walked up to him! There was that same black shiny nose, the antlers were the same, 8 points, that wide spread . . . so it must have been the same nose. The blood of my ancestors was saved. I've always said you only get one chance at the big ones, but this time I'd had two. Must be that George H. Block leads a good clean life.

The antlerless season found me out with Patrick. We had earlier got Washington County antlerless licenses, and my wife and Pat would have to use theirs. First thing we did was to go to the spot where my wife had missed a buck during the second week of the season. She drove the cover while I sat with my son. Two does came running out, and Pat shot at and missed one. I hoped this wasn't



SON PAT proved himself a chip off the old block with this Washington County doe taken during the antlerless season.

going to be one of those days. I told Eileen to post the other end of the woods and Pat and I would track these in the snow. After waiting for her to get on her stand, we started. I was going to show Pat how to track deer and score. He was to walk very, very slowly along the trail while I brought up the rear. I told him, "Hunt with your head and eyes, not your feet."

We had covered perhaps 300 yards when I saw deer running ahead of us. Pat's 243 roared. The deer flinched, ran another 25 yards and collapsed. We field-dressed it and he dragged it out.

I went to find his mother; as I walked, I figured this had been a good season. I'd shot my buck and my son had a doe. Two out of three wasn't bad. The Blocks would eat deer meat again, for we'd met the whitetails fairly and won . . . or two of us had, anyway.

That was the rub. My wife still had bad dreams over that big buck she'd shot at. It was a thorn in her side, for she is a good shot and just couldn't believe she could miss something that large at 35 yards. I tried to ease her hurt pride by telling her she couldn't help it . . . after all, she was only a woman, and every man knows men



GEORGE'S WIFE Eileen made it three for three for the Blocks with this archery kill —the same deer she'd earlier slightly wounded in rifle season.

are better hunters! Among other things, she called me a typical male chauvinist. Now I've heard that word for years and still don't know what it is, but I don't think it's a compliment.

The holidays passed sadly in the Block household, because we lost one we all held dear. My father died New Year's Eve after a long illness. Because of our loss, we didn't hunt in the extended small game and archery season until January 7. That Monday my brother-in-law Jack Daniels, of Washington, Pa., stopped by in the afternoon to see if I wanted to hunt grouse. I agreed to go, as I needed to get out and do something. I asked my wife if she wanted to go along, and she said she'd go hunting but not with us. She wanted to take her bow and hunt deer. So off we went. We told her where we'd be hunting, so she could take advantage of any deer we might stir up.

Jack and I hunted hard with little success and decided to try and find my wife before dark. I told Jack she'd be on the stand where she'd missed the buck. As we approached the corner where I thought she would be, I saw her walking around in circles, searching the ground. When she saw us, she excitedly told us how just five minutes earlier two deer had walked out in the open field above her, and she'd taken a 30-yard shot at the larger one. She was sure she'd hit it.

Jack asked which way the deer had run and when she pointed up the hill, he said, "What's that lying in the field up there?"

I looked and couldn't believe my eyes! There in the middle of a wide open field, 50 yards away, was a dead deer. Jack and Eileen didn't believe it either until we stood over it. Any non-hunter that saw us would have thought we were crazy as we laughed and danced around that deer. Settling down, I took out my knife and bent down to start the job that faces every successful hunter. As I turned the deer over, I saw two raw marks on its head where it had shed its antlers. Further examination showed a partly healed bullet wound high on the shoulder.

Could this be the buck she'd shot at earlier? I guess we can never be sure, but I'd like to think it was. It had been bedded in the same spot, it had been scratched by a rifle shot, and the angle of the shot matched.

"You only get one chance at the big ones," I'd said. Maybe I'll quit making statements like that.

And so, when the season was over, I had taken a large 8-point, my son had his doe, and my wife had shot a buck that had dropped its horns. She had done it with a perfectly placed arrow from her 40-pound bow. All this in Washington County, a county with a total kill that ranges from 500 to 1000 deer. Not a very likely spot for so much action, but it's where we went three for three.

Diet Effects on Deer

By Steve Liscinsky
PGC Wildlife Biologist

THE IMPORTANCE of diet to deer has long been debated by hunters and studied by many researchers. And yet there are those who still view the published results with skepticism; they claim the findings inadequate, too complicated, atypical of actual conditions, etc. They want simple explanations and demonstrations.

A recent effort by the Pennsylvania Game Commission did just that. The PGC study dramatically demonstrated what happens to male deer, captured as fawns on poor range in the state, which are put on the best diet known.

During the first two weeks of June, 1973, 26 fawns of approximately the same age (less than a week old) were captured by hand in the vicinity of Renovo. Because of the limited amount and poor quality of food, deer in this area are generally small in weight and antler size. Of the 26 fawns caught, 14 were females. These were immediately released. Of the 12 male fawns, one which apparently had been born prematurely died within 24 hours.

The remaining 11 buck fawns were taken to the deer research facility of Penn State University where they were cared for until September 25, 1973, when they were moved to a five-acre enclosure in Harry's Valley, northern Huntingdon County. While weighing the 11 deer, just before moving them, one broke its neck in the weighing box and died. This left 10 male fawns for the completion of the study.

Vegetation in the enclosure was about as dense as any to be found in Pennsylvania, a result of clearcutting a mature oak forest and fencing out deer for several years. A stream, which flowed year-round, ran through the enclosure. In addition to the abundant natural vegetation, pelleted deer food was constantly made available in six feeders distributed throughout the enclosure.[1]

During that time, 8500 pounds of the pelleted food was consumed. Some of this food (an estimated 10 percent) was lost to spillage and weather damage, and to animals other than the deer—porcupines, woodchucks, mice, rabbits, songbirds, etc. What was left averaged out to 2.3 pounds of pelleted food consumed per deer each day. Consumption of the pelleted food was not uniform from day to day throughout the study period; there were times when the deer ate more vegetation, especially when a new source of food became available, such as the first leaves in spring. A good grade alfalfa hay was provided,

ANTLERS ARE mounted on board almost exactly as they were on the deer—the same distance apart, at same angle to head and each other, etc.





WILDLIFE BIOLOGISTS and assistants weigh deer at age 15½ months. Antlers also were measured at this time. Effects of proper diet were obvious.

but the deer did not feed on it. The only obvious sign of heavy browsing on the "woody" vegetation occurred in late summer.

While the bucks were in the enclosure they were never captured for weighing or measuring. The risk of injury to the deer, and subsequent effect upon their body and/or antler development, was too great. So instead of capturing them, we took photographs.

On September 17, 1974, when the deer were 15½ months old and nine out of 10 had shed the "velvet" from their antlers, they were recaptured for examination. Six were caught in modified "clover" traps and four were taken by remote injection of an immobilizing drug. All the deer were weighed and measured at this time, and their antlers were sawed off just above the burr.

Weight and antler development of these well-fed bucks differed dramatically from those of 40 same-age bucks taken by hunters in the Renovo vicinity during the 1973 deer season. This was the same general area where the 10 test animals had been captured. To compare weights, it was necessary to convert field-dressed weights to live weights. Conversion tables constructed from previously collected data were used.

The average live weight of the free-ranging deer (those bagged by hunters on what is considered poor deer range) was 108 pounds; the average live weight of the 10 study deer was 140 pounds. Weights ranged from 90 to 127 pounds for the 40 free-ranging bucks and from 116 to 167 pounds for the 10 study animals (see Table 1). The heaviest deer in the study group, incidentally, was the only one with antlers still in the "velvet" and with a partial summer pelage at the time of above-mentioned examination.

Differences in antler growth between those deer on the "open" range and the ones kept in the study area were even more dramatic than differences in weight. Thirty-three (82 percent) of the 40 free-ranging bucks had "spikes" for antlers, while only one (10 percent) of the 10 captive deer had spikes. The average number of antler points was 2.4 for the free-ranging deer and 4.9 for the captives. In these comparisons, a point had to be ¾ inches or longer to be counted and the average antler beam diameter was about 30 percent larged on the study bucks. These and additional antler and body measurements are shown on the table.

This demonstration confirms earlier studies which point out the importance of adequate nourishment to deer for both antler development and body growth.

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1. The pelleted food contained 16.1 percent protein and 10 to 12 percent fiber. A breakdown of food ingredients follows:

	Percent
Corn Meal	26.35
Oat Meal	20.00
Alfalfa Meal	16.00
Soybean Meal	15.50
Oat Hulls	10.00
Molasses	8.00
Liquid Protein	2.00
Salt	1.00
Dicalcium Phosphate	.50
Ground Limestone	.05
Trace Minerals	.05
Vitamins A, D & E	.034

TABLE I

Information on Male Deer Captured as Fawns the First Week of June, 1973 on the Poorest Range in Pennsylvania (Renovo Vicinity) and Kept on the Best Known Diet (Unlimited Amount and Choice of Natural and Prepared Foods)

	DEER IDENTIFICATION NUMBER											
Live Weight (lbs.)	544	564	556	560	550	568	521	511	507	573	Average	Average of 40 yearling bucks bagged in the area in 1973 gun season
June 28, 1973	12	22	14	12	15	15	14	17	20	19	16.00	
July 27, 1973	20	34	26	24	24	22	26	34	32	32	27.40	
Aug. 29, 1973	32	45	40	37	38	39	43	54	51	48	42.70	
Sept. 25, 1973	43	52	55	50	50	55	60	69	68	65	56.70	
	On September 17, 1974:											
Live Weight (lbs.)	116	127	129	138	141	142	146	146	148	167	140.00	..108 (4)
Body Measurements (in.)												
Chest Circumference	32.25	32.50	31.50	31.50	32.50	34.50	31.25	31.25	34.75	37.00	33.38	
Body Length	51.50	61.00	60.50	57.25	56.50	60.50	50.00	59.50	59.50	59.25	57.55	
Shoulder Height	35.75	37.50	34.50	36.25	35.75	37.75	37.75	37.75	37.00	38.25	36.83	
Antler Measurements												
Beam (mm) (1)	17.00	24.00	19.00	17.00	15.00	22.00	17.00	20.00	19.00	21.00	19.00	.. 13
Widest (in.)	4.25	14.00	9.25	9.25	5.75	8.25	8.75	11.25	10.25	8.25	8.93	
Narrowest (in.)	1.50	11.00	4.50	7.00	5.00	6.00	4.75	7.75	6.75	3.75	5.80	
Height (in.)	5.50	5.50	7.75	6.50	4.25	7.00	7.50	6.50	7.75	7.25	6.55	
Weight (g) (2)	70.00	202.00	188.00	120.00	55.00	184.00	167.00	162.00	79.00	189.00	141.60	
Volume (cc) (2)	38.00	92.00	122.00	58.00	36.00	89.00	91.00	87.00	94.00	93.00	80.00	
Points (in.) (3)												
Over ¼	3	6	7	4	5	3	5	7	5	7	5.2	
½	2	6	7	4	5	3	5	6	5	7	5.0	
¾	2	6	7	4	4	3	5	6	5	7	4.9	.. 2.4
1	2	6	7	4	3	3	5	6	5	7	4.8	
1¼	2	4	7	4	2	3	5	6	5	7	4.5	
1½	2	3	5	3	2	2	4	4	4	6	3.5	

(1) Beam—Average of both antlers.
(2) Wt./Vol.—Total of both antlers, above burr.
(3) Points—Total of both antlers.
(4) Converted from average field-dressed weight of 86 pounds.







JON R. NICOLAI, far left, Horsham, and Bucks Co. 8-point. ... and Jr., above left, Shillington, and Franklin Co. bucks. Right, ... Luzerne, with their deer.

It's Whit

IN 1974, Pennsylvania's ... 125,000 whitetails. Som... from farm regions of Wa... counties, others slim yea... were spikes from the nort... deer taken with buckshot... cities in the southeast– ... trophies to the hunters w... we begin the '75 season, a... harvest. When you take ... member to wear fluores... and pass up questionable





BOB FISS, left, Norristown, and Joe Baldassari, above, Scranton.

HENRY DAXION, left, Apollo. Mrs. Bonnie Smouse and her father, Frank Makel, Waynesburg, took trophies shown below.

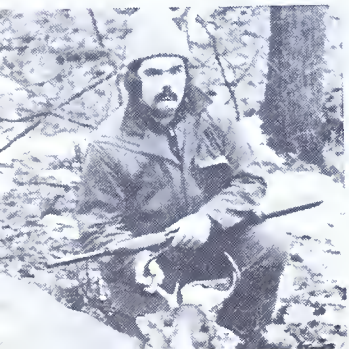






MEMBERS of Camp ... above, with their dee...

DON SMITH, Pittsburgh, below left, and Larry Walters, Beaver Falls, below right.





COLLINS YOUNG, Riverside, below, with Montour Co. buck.





. McComsey Sr.
ietta Sr. and Jr.,





FRANK SECUNDA, Matt Beatty, Jack Penney and Tom Lydon with Tioga Co. whitetails, left. Right, Pam Collins, Emsworth, got doe in Westmoreland Co.

l Time!

ters harvested well over
ig, heavy-antlered bucks
, Bradford or Lancaster
om the Poconos. There
butter-fat Juniata does,
ally on the outskirts of
sylvania whitetails, all
ght them to bag. Now
ns point to another good
orests and woodlots, re-
rs, identify your target
. . in short, hunt safely.





BARRY LEVAN, Fleetwood, left, Rusty Palmer, Bristol, right. Below left, Jay Jenkins, Folsom, right, Mick Frame and Rick Haldeman, of Glen Moore.



, Snow Shoe, Pa.,
974.





, Greg and Dan Ditten-
nd Steve Carbaugh, of
with their Tioga Co.

BELOW, Jim and Carl Weaver and John McCurdy, of Jackson Center. Right, Steve Suriani, Philadelphia.











ABOVE, Dave Hanenstein, Jr., Aldenville. Left, Betty Dilick, Kittanning.



JESSE HANNAH, 13, got this big buck in Jefferson Co.



STEVE STAPLES above, Rockville, Md. Below, 8-point of L. E. Buccilli, Philadelphia.

DICK and Linda Beck, West Chester, below left. Greta Gells, Dilltown, right.







BRUCE ROBERTSON, above, Brookpark, Ohio, and Warren Co. trophy.



JIM JACOBS, below, Allentown.









TERRY WAGNER, Penns Creek, above. Bill Wurfel, above right, Robbinsville, N.J. and Susquehanna Co. buck.

JOE, Tom, Daryl and Bob Sanderson, of York, made "clean sweep" for family. Above right, Ron Elliott, Wilmington, Del. and Potter Co. buck.

RIGHT, M. R. Dallas, Norristown. Below, Roger Polasky, of Pittsburgh.











LEFT, Bob Gongaware, North Huntingdon; above, Al and Ed Richnafsky and their Fayette Co. trophies.





JOE BALINT, Doc Sranchik and Tom Vash, West Mifflin, above. Right, George Bartell, Oley, Pa.



VIRGINIA SOUDER, Orrstown, above. Mike Flack, Langhorne, below.







LEFT, Dennis Yerk, Tylersport; above, Tom Tanski, Valencia; below, Dick Logan, Lyndora.

BOB MANNS, Johnstown, and sons Mark and Bobby, below.







GROVER DUFFY, Oregon Hill, above. Below, Andy Monasky, Pittsburgh.



GARY LOCKERMAN, left, Highspire. Below, Bob Vicini, Euclid, Ohio.

ALICE ALLEGAR, of Harrisburg, below.







FIELD NOTES

Granny a Distant Second

SCHUYLKILL COUNTY – During intermission in one of my hunter education classes, I overheard this comment from one of the youngsters: "Boy, his slides are a lot better than the ones grandma shows at our family reunion."—District Game Protector C. J. Harris, Pine Grove.



The Trapper Returns

BRADFORD COUNTY – I needed to remove some skunks from my own property, but all my box traps were in use. I kept putting my wife off, saying I would get a trap back soon, until one night I returned to find a distinct aroma around and through the house. Earlier that evening our two dogs spotted one of the visitors and started to chase it out of the yard—until a direct hit sent them flying back into the house. Needless to say, I received a very cool reception upon my return and there *IS* a trap set now!—District Game Protector A. D. Rockwell, Sayre.

A Big, Big Case

BERKS COUNTY – The persistent ringing of our phone early one morning finally caught my attention. After stumbling to the phone I heard the cheerful voice of the Berks County Police Dispatcher. "Robeson Township police have stopped a truck with several men who have killed three deer," he told me. I wasted no time getting dressed and hitting the road; these calls are few and far between. The police were investigating reports of gunfire in the area when they found the truck. A check of the vehicle revealed hair and blood in the truck bed and blood on the occupants. They admitted killing and butchering three deer earlier that evening and finally decided to turn the deer over to us. To complete the party, District Justice George Wenger was called to his office. The four violators admitted their guilt and had to pay fines totaling $611 each. Seems to me that $2444 would buy a lot of pork and beef, even at today's inflated prices.—District Game Protector J. A. Leiendecker, Reading.

Just Maybe

ERIE COUNTY – They say some good comes out of everything. I felt the television program "Guns of Autumn" was very bad. However, more people have been turning in slob-hunters lately instead of looking the other way. So maybe the TV show accomplished something good. —District Game Protector W. A. Lugaila, Waterford.

Whose Generation?

SOMERSET COUNTY — While manning a display at the Somerset County Fair, I noticed a woman looking at a nearby display of farm produce. She walked away and then sent her young son behind the wired-off area to steal a large onion. Bruce Porter, the grandson of one of my deputies, told the woman to put the onion back. She did so and left the display in a huff. If this is any indication of what our young people are being taught at home, we are in for trouble. (Note: the display of onions won first place, so at least the woman had good taste.)—District Game Protector R. J. Askey, Meyersdale.

Variety—Spice of Life

CAMBRIA COUNTY — Saw many interesting things this month. One was a native chestnut tree 25½ inches in circumference that had some native chestnuts on it. The squirrels in the area were eating the ones they could find. At a distance of about 500 yards I watched a red-tailed hawk leisurely gliding along. Suddenly it was savagely attacked by a Coopers hawk and beaten to the ground; what the outcome of the confrontation was is unknown. While checking archery hunters I noticed a young deer with pure white up to its knee joints prance out into a field in front of two other deer.—District Game Protector D. W. Jenkins, Patton.

Compound Effectiveness

ERIE COUNTY — Passage of the law to legalize compound bows was indeed a fine move. I feel the compound bow increases probability of a clean deer kill by at least 50 percent. —District Game Protector G. E. Gibson, Corry.



Frozen Goodies

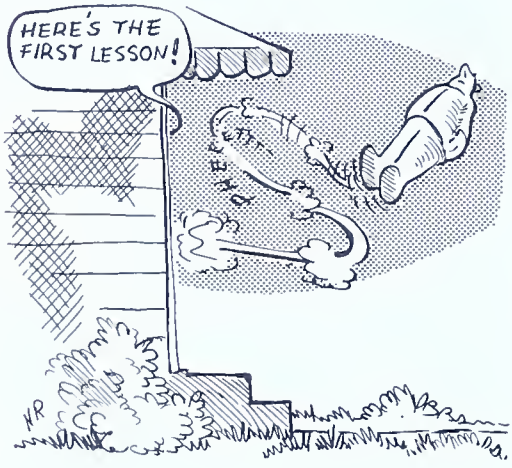
CLEARFIELD COUNTY — Much to Mrs. Z's dismay, our freezer usually contains more wildlife specimens than food for the table. It's not unusual for the lady of the house to fetch what she believes to be a package of ground beef and instead come up with a frozen muskrat or woodchuck which has been promised to a school. —District Game Protector G. J. Zeidler, Rockton.

They're On The Ball

ADAMS COUNTY — Notes from hunter education programs . . . at the Upper Adams Fish and Game course I was showing the slide series "What Do You See?" which has a picture of a crow sitting on a tree limb on the crest of a hill. I asked, "Is this a good shot to take?" The answer was "No, you can't eat crows." At another course, Deputy Glenn Herring asked, "Is there any time that you may hunt in a safety zone?" The answer was, "Yes, when the signs are not up." At York Springs, Deputy Herring had a boy demonstrate the two-hand carry and asked the rest of the class, "How many hands does he have on the gun?" The answer was "Two—that's all he has."—District Game Protector G. W. Becker, Gettysburg.

Autumn Arrivals

Autumn brought out many things: changing foliage, the hunting urge, mushrooms and "no trespassing" signs. Better think why, hunters.—Land Manager J. A. Booth, Trucksville.



It's a Dummy!

FRANKLIN COUNTY — Helen Starliper, whose husband is a deputy, came out of the bedroom one evening to see a stranger stretched out on the living room floor. Her screams brought her husband running to see what was wrong. Turns out it was nothing. He was to give a first-aid course at the next deputy meeting and had inflated the dummy used to demonstrate artificial respiration and left it on the floor.—District Game Protector R. E. Schmuck, Greencastle.

You Gotta Be Kidding

FRANKLIN COUNTY — While working on State Game Lands 169 in Cumberland County, I came across a prickly pear cactus growing on the side of a hill. This is just one of the many exotic plants to be found in the area.—Land Manager P. R. Miller, Chambersburg.

Half a Loaf . . .

SUSQUEHANNA COUNTY — One night, Hallie Hayden of Nicholson was driving along a road when a rabbit ran out ahead of the car. A great horned owl swooped down, grabbed the bunny and tried to fly away with its still-kicking prey. Unable to stay airborne with such a heavy burden, the owl quickly tore the rabbit in two and departed into the darkness with half a meal.—District Game Protector D. G. Day, Hallstead.

Good Ol' Walt

SNYDER COUNTY — Part of the anti-hunting problem stems from the urban dweller's misunderstanding of nature's true ways. At a recent state convention of sportsmen, a dedicated trapper used a phrase that points directly to the Bambi syndrome: "In the beginning there was Walt Disney, and he created animals in the likeness of man."—District Game Protector D. L. Myers, Selinsgrove.

Driver's Side?

DAUPHIN COUNTY—While driving through Clarks Valley, a skunk waddled out in front of my car. As I slid by, it raised its tail in salute and let me have it from one end of the car to the other. If that's appreciation, I'd hate to see that skunk when it gets mad.—Land Manager K. M. Zinn, Dauphin.

Chain Reaction

BEDFORD COUNTY — Recently, Deputy Melvin Boore went out to pick up a road-killed deer. The driver of the vehicle had tried to miss the deer but, of course, wasn't successful. He swerved, hit the deer, and knocked over a utility pole. The pole fell, killing two ducks.—District Game Protector B. L. Warner, Manns Choice.



Lespadeza Tomasetti

DAUPHIN COUNTY — Deputies Dale Snyder and Ron Tomasetti were hunting doves on the farm of John Kreider this past September. Cover there is very thick multiflora rose and sericea lespedeza. Tomasetti winged a dove which fell between him and Snyder. The dove fluttered several times and out of the lespedeza popped a gray fox. Before anyone could do anything, the fox snatched the dove and ducked back out of sight.—District Game Protector J. E. Schweitzer, Hummelstown.

Survival of Fittest

CRAWFORD COUNTY — Recently, Waterfowl Manager Ray Sickles, Deputy James Small and an interested sportsman found that two antlered deer—one a 17-point buck and the other an 8-point—had locked antlers. The 8-point was dead and the larger buck was dragging it about. Finally a rope was tied around the bigger buck and lashed to a tree. When the men sawed the antlers off the dead buck, the survivor left the scene quite exhausted but apparently no worse for the encounter.—District Game Protector L. V. Haines, Linesville.

Carniverous Chippie

ERIE COUNTY — I recently got a phone call from George McDonnel. His hobby is feeding and observing birds. George and his wife were much amused by the antics of a chipmunk which began using their bird feeder two years ago. Amused, that is, until one day they saw him with a bird. They took it away from him, thinking the chipmunk had found it dead. Later, they saw it with a second bird, and further watching revealed the chipmunk catching and killing as many as seven birds in one day—all English sparrows. I wonder if this happens in the wild.—District Game Protector R. W. Meyer, Fairview.



Half-Visibility

TRAINING SCHOOL — In Butler County, the Glades Project has finally been completed. The water level is up and various waterfowl have already been sighted. On almost any evening Canada geese, mallards, and woodies can be seen. It has, however, created at least one problem for the local high school. The cooling air over warm water often produces a "pea soup" fog by 9 p.m.—right about halftime of the high school football game. —Trainee R. D. Hixson.

Some Like it Hot

TRAINING SCHOOL — While preparing dinner for the trainees here at the school, the cook was adding pepper to the beef stew when the lid fell off of the can and practically emptied the whole tin into the stew. One of the trainees, unaware of the pepper in the stew already, liberally sprinkled his portion with even more pepper. After several glasses of water his only comment was "Wow, that's a little hot, isn't it?" Yes, Pat, it is.—Trainee D. E. Marks.



True Game Protector

JUNIATA COUNTY — Deputy George Campbell, Port Royal, had parked on a hill during night patrol and was standing outside his car listening for shots. He heard something running toward him, coming fast. A rabbit ran under his legs and ducked beneath the car. Just then, George sensed something else coming and ducked just as a great horned owl swooped by inches over his head. It lit in a tree 20 yards away and stayed there about 15 minutes, then took off. Later, the rabbit bounced out from under George's car and went on his way. This is being a game protector in the truest meaning of the title.—District Game Protector R. P. Shaffer, Mifflintown.

Har! Har!

TRAINING SCHOOL — While heading back to school the first weekend in September, I got three miles from home and blew a universal joint on my truck. After calling my wife and brother and transferring all my gear to our VW, I hit the road again about an hour late. The trip was uneventful until I made my usual stop at a service station near Route 80. While getting ready to plug the sandwich machine, I mentioned my problem to the owner. He took pity on me and I ended up with fried chicken, sweet potatoes, tomatoes, and homemade bread with apple butter, all prepared by the owner's wife. So the earlier misfortune was worth it. However, as I was about to depart, the owner said, "Next week when you stop, we'll have venison." He was joking . . . I hope!—Trainee W. R. Dilling.

Raptor Review

BUCKS COUNTY — I was a long time getting around to it, but after more than 20 years' association with the Game Commission I spent several days observing hawk migrations along Blue Mountain in Lehigh and Northampton counties. Old-timers say that in the heyday of the hawk migrations the sky was black with the birds as they soared their way to the southern wintering areas during October and November. Things have not gone well for the raptors. Habitat reduction, pesticides and indiscriminate shooting have caused sharp declines in hawk numbers during the past 30 years. Despite all this, I was heartened to see vast numbers of birds silently riding the updrafts along the ridge. One day must have been reserved for the broadwinged hawks, because as I stared in awe, more than a thousand of them coasted by my blind in less than an hour.—District Game Protector W. J. Lockett, Perkasie.

CONSERVATION NEWS

By Ted Godshall



GOVERNOR MILTON J. SHAPP receives 1975 Pennsylvania hunting license number 1A from Elmer M. Rinehart, president of the Pennsylvania Game Commission, as Executive Director Glenn L. Bowers and Deputy Director Harvey A. Roberts look on.

PGC Game Fund Contributors — 1975

At various times we have made it known in GAME NEWS that the Game Commission is permitted to accept donations from any person, association, corporation or firm. Contributions go toward purchasing public hunting lands, which are used by hunters and non-hunters alike, and for other wildlife management uses. Our records of contributions sent directly to Harrisburg indicate that during 1975 the following persons and groups generously donated to the game fund:

Mr. John Smith, Aliquippa, Pa.; Mr. George Auerbach, New Providence, N.J.; Mr. Fred Barnard, Houston, Texas; Mr. Bradley W. Arentz, Lancaster, Pa.; Rev. Labert Altemose, Grantville, Pa.; Ms. Edith Berry, Lockport, N.Y.; Mr. Paul Bell, Cincinnati, Ohio; Mr. David McCleary, Chambersburg, Pa.; Mr. Harry Miller, Sharon, Pa.; Mr. Richard A. Weimer, Bethlehem, Pa.; Mr. Charles Nehf, Allentown, Pa.; Pennsylvania Trappers Assoc., Elizabeth, Pa., and Delaware Valley Fish & Game Assoc., Point Pleasant, Pa.

If we have missed giving credit to any deserving person or group, we sincerely apologize. These contributors have certainly done their part for conservation and wildlife management in Pennsylvania.

Available Publications

The following publications are available from the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120. Prices quoted include taxes, handling and postage.

GONE FOR THE DAY, by Ned Smith. All of the outstanding columns and artwork which appeared under this title in GAME NEWS during a four-year period. Delightful reading for everyone. 216 pp., $2.50.

THE WHITE-TAILED DEER IN PENNSYLVANIA, by Stanley E. Forbes. Detailed information on all phases of the whitetail's life. 40 pp., 50 cents.

BIRD AND MAMMAL CHARTS, by Ned Smith. Set 1 (20″ x 30″) $2.00. Winter birds, marsh and water birds, waterfowl, birds of prey. Set 2 (20″ x 30″) $2.00. Mammals of farm and woodlot, mammals of the mountains, birds of the forest, birds of field and garden. Set 3 (11″ x 14″) $2.25. All eight charts listed in Set 1 and Set 2. Individual charts not sold in either size.

First Refuge

Realizing a need for wildlife habitat, President Theodore Roosevelt in 1903 set aside 3-acre Pelican Island in Florida as the first Federal Wildlife Refuge.

Bear Sense

All bears, except the polar bear, have very poor eyesight. They depend on their ears and their nose for defense against intruders.

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WOODLAND THOUGHTS

BY LOU HOFFMAN
Wildlife Education Specialist



The ridge is gray and leafless now and the points, knobs, and hollows are more obvious than they were a few months back. Summer's protective greenery paused for a short but splashy finale and then lost to the forces of wind and rain as the leaves fluttered earthward. This mulchy blanket covers the fruits, nuts and seeds of the forest, and the fall planting is done. Deer, squirrels, turkeys and others will uncover some of these nutritious treasures, each discovery making the oncoming winter a little less threatening.

Another animal is here now, too. He's not new to the scene, for like the deer and the squirrel he's been around for a long time. He used to come here out of need and was a regular visitor to the ridge, but his culture changed that. Now, his physical needs are sustained through the farmland in the valley—but what of his spiritual needs? Needs that mere protein and carbohydrate won't satisfy . . . needs that make this animal return to re-enact something . . . something that isn't as tangible as the flesh of the deer he may take . . . something that's difficult to describe. The animal is man and he is a hunter.

The hunter's moon shines bright, and the presence of Orion climbing into the winter sky complements the season. With the year almost gone, the nights a little longer, the fire a little warmer and the hunting season fading, it's only fitting to ponder the woodland thoughts we've just recently collected.

HUNTING is an old activity, as old as man himself. That's been said before.

Some oppose hunting. Television programs like "The Guns of Autumn," books like Cleveland Amory's *Mankind*, and some very sincere people voice their objections regularly. And that's not new either.

Fact is, there's not a whole lot of newness in anything we may say. But by putting a few thoughts together and critically examining what we have done, we sharpen our awareness and understanding toward hunting and the natural world. And if you think I'm exaggerating, or this is irrelevant, you are probably part of the problem we are facing today.

Explaining why we hunt is an extremely difficult thing to do—but not impossible. Someone said that when the second man appeared on earth the rights of the first were divided by two. Now, divide your rights by all the rest of the people around today and you have the cause of our problems. This simple statement, which can be applied to hunting, holds a lot of truth. But that's where we are and

doesn't really explain anything. Let's back up.

The mechanics of the hunt are easy to describe. A gun (30-30, 30-06, 222, 12 gauge, whatever), a shell, a bow, an arrow, a knife, an insulated vest, a thermos, a rope . . .but what about the hunter? What motivates him? With few exceptions, both hunters and outdoor writers have been guilty of talking and writing only about these mechanics. An extremely cold approach to a warming experience.

The outdoorsman of all seasons—and particularly the hunter of fall—is doing more self-examination than ever before. That's good, for if the hunter were as savage as some claim he would ignore this criticism.

Deer Don't Change

The first hunter didn't think much about his activity. He was hungry and the deer was food. The deer's quickness and cunning were handicaps that sometimes made the hunter even hungrier. Time changes things, however, but the deer didn't change much. He still sneaks through the thicket, his senses alive with concern. Since the hunter's need for the deer's flesh is less, his respect for the animal is more fully cultivated. And that brings us to today.

The hunter is torn between the drives instilled by his ancestors and the modernization of the recreational industry. Aldo Leopold in *Wildlife in American Culture* put his finger on the issue like so:

"Then came the gadgeteer, otherwise known as the sporting goods dealer. He has draped the American outdoorsman with an infinity of contraptions, all offered as aids to self-reliance, hardihood, woodcraft, or marksmanship, but too often, functioning as substitutes for them. Gadgets fill the pockets, they dangle from neck and belt. The overflow fills the auto trunk, and also the trailer. Each item of outdoor equipment grows lighter and often better, but the aggretate poundage becomes tonnage. The traffic in gadgets add up to astronomical sums, which are soberly published as representing "the economic value of wildlife." But what of culture values? As an end-case consider the duck hunter, sitting in a steel boat behind composition decoys. A put-put motor has brought him to the blind without exercise. Canned heat stands by to warm him in case of a chilling wind. He talks to the passing flocks on a factory caller, in what he hopes are seductive tones; home lessons from a phonograph record have taught him how. The decoys work, despite the caller; a flock circles in. It must be shot at before it circles twice, for the marsh bristles with other sportsmen, similarly accoutred, who might shoot first. He opens up at 70 yards, for his polychoke is set for infinity, and the advertisements have told him that Super-Z shells, and plenty of them, have a long reach. The flock flares. A couple of cripples scale off to die elsewhere. Is this sportsman absorbing cultural value? Or is he just feeding minks? The next opens up at 75 yards; how else is a fellow to get some shooting? This is duck shooting, current model. It is typical of public grounds, and of many clubs. Where is the go-light idea, the one bullet tradition? The answer is not a simple one. I do not pretend to know what is moderation, or where the line is between legitimate and illegitimate



THE INTANGIBLES associated with hunting, such as this woodie with its mirror image, should be as important as the game taken.

gadgets. It seems clear, though, that the origin of gadgets has much to do with their cultural effects. Homemade aids to sport or outdoor life often enhance, rather than destroy, the man-earth drama; he who kills a trout with his own fly has scored two coups, not one. I use many factory-made gadgets myself. Yet there must be some limit beyond which money-bought aids to sport destroy the cultural value of that sport."

The remarks of Leopold, made forty years ago, are still timely today. The hunter must decide his own degree of moderation. Finding that sense of moderation involves an individual search for each hunter. A search that uncovers a realization that cannot be over-emphasized. One of the virtues of hunting is that . . . "Ordinarily the hunter has no gallery to applaud or disapprove of his conduct. Whatever his acts, they are dictated by his own conscience, rather than by a mob of onlookers (Leopold)." Think about that for a moment. If the cameras for "The Guns of Autumn" followed you this fall, would you be ashamed?

The intangibles associated with hunting should be as valuable and important as the game taken. Collectively they brew the lore that makes the outdoorsman. Experiencing these things involves a great deal of perception, and the outstanding characteristic of perception is that it need not include any consumption of our wildlife resource. Being a *perceptive* hunter is being a *real* hunter.

In the final analysis, hunting is essentially a value judgment left up to the individual. Professional conservation departments monitor the welfare of the hunted species ad establish regulations that protect them. By challenging these decisions, special interest groups improve the techniques and effectiveness of the wildlife agencies. Sport hunting is not detrimental to our wildlife populations and, as such, should not be discontinued because of that argument.

As a civilized society we prize those accounts that describe the development of our culture. We often portray these accounts in museums, but a museum houses more than artifacts and remnants of our past. These relics help create a story of the past which adds value to our lives today, and perspective to tomorrow—especially for our children. Hunting, as an activity is like a living museum which depicts man's close relationship to the soil—a relationship which too few people realize. Discarding it as simply barbaric would synthesize our lives even more, and deny many of a natural expression in a world where such opportunities are too rare.



HUNTING is essentially a value judgment left up to the individual. How would you score?

This is not to say that all hunters are sportsmen that adhere to the ethical considerations suggested. I am not even suggesting that the slobs are as small a group as we like to think. But we're cleaning up our ranks and will be better off for our efforts. When the smoke clears there will be a lot of good hunters remaining. Hunters that hunt their own simpler self. The self that knows the difference between a white oak and a black . . . between a hickory and a butternut, between hare and rabbit. The self that knows the whir of a grouse, the hoarse call of a cock pheasant, the rasping bark of a fox . . . that can, on occasion, put up a bird and merely stand and watch, in admiration, though the game bag is still empty. . . . When you can do that, you are truly a hunter.

A Friday-the-13th Buck

By Susan M. Pajak



LOUELLA MICHAELS found Friday the 13th to be a lucky day for her. That's when she took this fine 8-point, 205-lb. trophy in Warren County.

PICK ANY Friday the 13th and there are many who suffer from the heebie-jeebies. Black cats, ladders and cracks in the sidewalk are carefully avoided, and should any salt get spilled it is quickly tossed over the left shoulder. To dispel the evil spirits a stubby church candle also flickers guardingly on the family table . . .

But for Louella Michaels of Sugar Grove in Warren County, Friday the 13th in last year's buck season couldn't have been luckier. That's when she downed a 205-pound, 8-point buck with 22-inch antler spread. Here's her story:

"At 10:30 in the morning on that day I was on stand when I spied this deer. I put my 32 Winchester with 4x scope on it, and I swore I saw an elk, the horns were so huge!

"I started to shake so badly that I had to talk to myself and get calmed down. When I did pull the trigger the buck took off like a flash and disappeared over the brow of a hill.

"My first thoughts were that no one was going to believe me—not after last year, when I missed one that large or larger on the last day of the season. That's why my two sons bought me the scope for my gun.

"Anyway, I hurried to the spot where I had seen the deer—it was about a hundred yards away—and there were signs that I had hit it.

I Even Cried a Little

"I followed the trail about another hundred yards and there it was. I was so happy I think I even cried a little. Anyway, I removed my jacket and filled out my deer tag and attached it to the buck. But when I went to move the buck, it was so big I couldn't budge it an inch.

"I had never dressed a deer all by myself, although I have helped with plenty of others, so I just began and everything was fine. I did real well, no problems.

"But even after all that, I still couldn't drag him. I emptied my gun, put it through the back of my hunting coat, straddled the deer's neck and dragged it as best I could.

"It was really rough going. I finally got it to move a little with all the shoving I was doing. Anyway, I have a very steep hill to come down, so I shoved the back end of the deer down first so I wouldn't break that beautiful rack.

"On the way down one antler caught in my pocket and tripped me. Both the buck and I rolled down the

GIRLS, GUNS, & GAME...

hill together. What a picture that would have made!

"When I landed at the bottom I knew I was close to my house, I guess about 500 yards, so I shouted a couple times and my son came and helped me the rest of the way home.

"I remember thinking this sure was my lucky day, for I was born on a 13th in April, and have always claimed that the 13th was my lucky day. It was!"

Louella has been hunting since she was 16 years old and has 10 deer to her credit. She advises that we dress extra warm to withstand the weather. Mrs. Michaels further advises us to sit still when deer hunting; stay in the same place, don't lose concentration, and don't fidget and think of other things. Think deer.

Lola Jantz of Ohio wishes to thank all the readers who advised her on her boot problem. She solved it by buying a boy's boot in a small, narrow size. Lola says she'll see you all in the woods this hunting season!

And Susan says the same—and please wear blaze orange as an extra safety measure. Merry Christmas to one and all and a twink on the nose to Uncle Clyde Parlor of West Elizabeth, not hunting as much as in his younger days but who can still spot a turkey before I even get one eye open!

Youths 12 & 13 Can Hunt with Any Adult

A new Game Law provision now permits 12- and 13-year-old hunters to be accompanied by any adult who is 18 years of age or older. Previously, 12- and 13-year-old hunters had to be accompanied by a parent or guardian or some other adult member of the family. Now, any adult 18 years of age or older, with the approval of the parent or guardian, may assume the role of a parent or guardian in accompanying a 12- or 13-year-old youth while hunting. Prior to the Game Law change, it was nearly impossible for some youngsters 12 and 13 years old to enjoy sport hunting if they were unfortunate enough to come from a family of non-hunters. The new provision will also take care of cases where the parents may be separated or divorced, where a parent is deceased, etc. Those active in the "Big Brother" plan and similar programs will find the change in the law helpful in carrying out wholesome outdoor activities with their young charges.

Flying Appetite

The tiny bat has a big appetite. It will eat a quarter of its weight at one meal and more than half of its weight every night.

Don't Waste Time

When only a day or two old, antelope fawns can run at speeds up to 25 miles per hour for short distances.

Christmas Is Here Again

By Les Rountree

"DEAR Les: For the past three Christmas seasons my usual plan of attaek (to make sure I get some useful stuff from my family) has been to mark several eopies of GAME NEWS and plaee them near high traffie areas. It works too! Sure hope you'll be doing that gift eolumn again this December!"

That letter and others like it eause me to eling to what has beeome a tradition and seleet some outdoor goodies that look like winners to me. I ean't imagine an outdoorsman who has "everything." There is always one more item that will make life a bit more fun or simply ereate that pride of ownership that eomes with knowing that wanted pieee of equipment is resting in the attie or eellar or wherever you store it.

Readers know by now that I'm basically a lazy shopper. I like to do most of my buying from outdoor-oriented mail order houses. Not only beeause it's easy, but also beeause they have equipment that has been tested in the field and found to be useful and durable. They too eome up with losers oeeasionally, but if they do, the item doesn't stay in the eatalog very long. Sportsmen as a rule are diseriminating buyers and won't stand for inferior merehandise.

It isn't necessary to buy from the eatalogs if you have a good outdoor store in your town. They will stoek the goods that are popular and useful in your neek of the woods and will, at times, order what you want. While they can't earry everything that mail order houses do, it's good business to buy loeally when possible. Besides, it's fun to handle the merchandise.

A few large department stores in shopping plazas and downtown loeations earry a good line of outdoor gear. In faet, there are more of them around now than last year. Outdoor business is *big* business and smart merehandisers are beginning to eateh on. The National Sporting Goods Assoeiation reported that $864 million was spent last year for outdoor equipment, and the sales figure for 1975 is expeeted to top one billion. That's enough money to make any retailer pay attention.

Stores, large or small, that eater to outdoorsmen are easy to identify. The tip-off is the sales people themselves. If they are knowledgeable about the merchandise and handle it in a eonfident manner, you feel more eomfortable in trusting their judgement. If the elerk stutters and stammers when you ask him for a bottle of Cutters of a paekage of lantern mantles, his adviee on sleeping bags is suspeet.

Good Gift Ideas

In the good-gift-idea department this Christmas, I'm going to lead off with those sliek looking kit bags that Orvis has been offering for years. Four sizes are listed in their fall eatalog and eaeh one of them is a winner. They work out well for the wide assortment of gear that eampers, hunters, fishermen, photographers and hikers aequire and like to earry with them. The small size is a great eamera bag and so are the larger ones if you have a surplus of photo gear. The Deluxe Tote Bag, at $12.50, is a great buy. It features a water repellent fabrie that looks good anywhere. The Oversize Kit Bag has two outside zipper compartments and a masonite bottom for extra rigidity. This bag is big enough for weekend trips and fits easily under the seat of an airplane.

L. L. Bean has listed their rubber moeeasins for many years but I didn't order a pair until last year (it was a present to myself). These are nothing

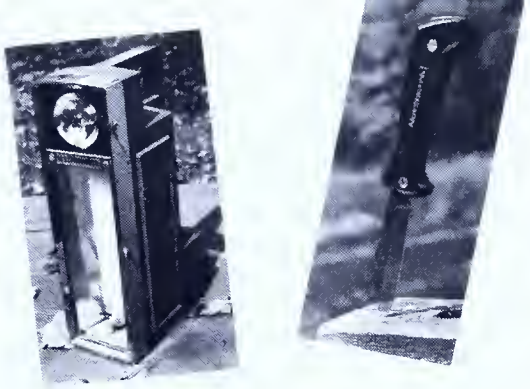
more than a pair of lightweight pacs cut off at the ankle. The tops are leather, the bottoms pure rubber. The greatest thing since sliced bread! I carry a pair of them in the car most of the time. For jumping out in the rain at odd times and for padding around a soggy campsite, nothing in this world beats rubber footgear. If you own a dog and your first activity in the morning is to accompany him on his "constitutional," these rubber mocs are perfect. Ladies like 'em, too, but they only come in men's sizes so take this into account when ordering for your favorite gal. They sell for $17.50.

Another item of footgear from Bean's is their old Maine Guide Shoe. This steady seller has been in the catalog for 40 years, I think. Maybe more. These shoes are soft, comfortable, and more rugged than they look. Though not recommended for long distance hiking over rocky terrain, for most general hiking and camping they are perfect. They do make this model for ladies and I recommend it highly. It's taken me 20 years to wear out three pairs of these shoes and I use them hard. The price is $33.25.

It's too late to worry about fall turkey hunting but just the right time to think about next spring's gobbler season. How about a turkey call as a gift? Pennsylvania doesn't have a corner on the turkey caller market—it just seems that way. Penns Woods Co. is located in the state and so is D-Boone Enterprises. Both firms make effective callers in all shapes and forms.

New this year is the rubber gobbler call from Penns Woods that doesn't require any mouth power at all. The corrugated rubber tube is held in the hand and shaken from side to side. The sound that comes out is amazingly like a gobbler's "rattle." When the *cluck-cluck* of a lovesick hen doesn't work next May, this call might do the trick. Sells for $9.95.

New from D-Boone is their "Turkee" call. This is a striker device that is advertised to work even in the rain



LOWRANCE Nightwin light, left, is rechargeable. Right, Normark's Big Swede folding knife.



BEAN'S rubber moccasins are versatile footgear, make great Christmas gifts . . .



. . . as do hunting and outdoor books, above, and Orvis kit bag, below.



when used with a strip of slate.

For knife fanciers, Normark has brought out a larger version of their Little Swede folding knife and—you guessed it—they call it the Big Swede. I like this one better since it features a locking blade that prevents accidental closing when rugged work is called for. It's all the knife any camper needs and does a fine job of dressing out big game as well. A lanyard loop is standard and that's a good feature for those guys who are always losing their knives. The entire knife comes apart for cleaning via two coin-slotted brass screws.

Vest for Safety

If the hunter in your family doesn't have one, by all means buy him a fluorescent orange vest. They are available in nearly every crossroads store and even though Pennsylvania law doesn't require it, every big game hunter should wear one. The cornfield pheasant hunter should too. Make this an early Christmas present. Deer season is still with us when most of you receive this magazine. If you don't have a blaze orange vest, get one now. It'll last for several years . . . even the inexpensive ones.

I like to receive flashlights as gifts. Maybe I was afraid of the dark as a child and the impact has lingered on. At any rate, no camper, fisherman or hunter ever has enough flashlights. At last count I had 18 and about four of them were in working order. I have just laid eyes on the super, ultimate flashlight of the 1970s. It's too large to pack around in hiking gear, but for home, car or camp, it's great. It's made by Lowrance and it's called the Nightwin.

This light has a far-reaching spot bulb and a 10-inch neon tube that will illuminate a small room or tent. The light is rechargeable with the cord hidden in a compartment in the base of the light. The rig is 13 inches high and 6½ inches deep. Space age in design, the light is handsome enough to display on the coffee table. It's expensive but something a real flashlight buff will love and use for many years.

I enjoy recommending books as Christmas gifts since they keep on giving for years to come. Especially if the book is a "reference" type. One of these is *The Mushroom Handbook* by Louis C. C. Krieger. For two or three years I've been trying to become a better mushroom identifier and picker. I love to eat mushrooms and, that being the case, wanted to learn more about them. Some years ago Ned Smith suggested the Krieger book as one of the best around. His advice (as it usually is) proved to be right. Using this book as my guide, I am now enjoying puffballs, horse mushrooms, shaggy manes and the common meadow mushroom. As I become more expert (?), I intend to try others. Mushrooms, like game, fish, berries, nuts and edible plants, are bounty of the land that can be enjoyed by the eye *and* the tastebuds. This is a fine beginner's book for the hopeful mushroom seeker (Dover Publications, 180 Varick St., NYC 10014, $4.50).

Two new books by Pennsylvanians are *Hunting the Long-Tailed Bird* by Bob Bell and *Deer Hunting Across North America*, edited by Nick Sisley. These are hunting books, pure and simple, but there is solid advice in both. They are from Freshet Press, 90 Hamilton Rd., Rockville Centre, N.Y. 11571, at $14.95 and $12.95 respectively. Sisley's book is a collection of chapters written by some of the nation's top hunters and put together in a way that entertains as well as teaches. Deer hunting in all its variations and the pursuit of all deer species is covered. Bell's book covers one creature, the ring-necked pheasant, in detail. Both are how-to books. Fine winter reading.



Practically every serious birder knows about the Peterson Series of Bird Guides. A new addition to this group is *A Field Guide to Birds Nests* by Hal Harrison. Longtime GAME NEWS readers will remember Hal as a frequent contributor to these pages as a writer and photographer. His son George later edited the magazine. This new book is published by Houghton Mifflin Co., 2 Park St., Boston, Mass. There are 222 color photos of bird nests in this book paired with an equal number of pen and ink drawings by Pennsylvania's own Ned Smith. The world of bird nests and how and why they are built as they are, is fascinating reading for serious birders and for those aspiring to be. The price is $8.95. To be honest about it, when I received a review copy of this book, my first reaction was less than enthusiastic. I've changed my mind completely. This book is the result of an enormous amount of work and research and is destined to become the standard reference text on bird nest identification. It's easy to understand and fun to read. I recommend it highly.

Eddie Bauer, Inc., a well established name in outdoor clothing and equipment, has moved east. The inauguration of a new store in Washington, D.C., marks their invasion of the East Coast. Bauer is one of the best mail order houses in the country, and that's how most of their merchandise is distributed. I could list a dozen items that turn me on, but I'll limit it to the Bauer Bush Jackets and Pants to match. For good looking outdoor apparel, these outfits are tough to beat. Rugged enough for camping but neat enough to wear anywhere except a formal reception. The big news is the addition of a short sleeve bush jacket that looks great without a belt. Styled for ladies too. Jackets are $37.95, pants $21.00.

For the person who likes to carry lots of things in his shirt pockets, Norm Thompson lists a new shirt that looks great (Ann take note!). It's long sleeved and sports two buttons on each breast pocket. Machine washable and made from heavy "schooner cloth" . . . whatever that is. Anyway, I saw one of these shirts on a fisherman this past fall and decided then and there that it was something worthwhile. Sells for $18.50. The color is faded blue. Yep, it has epaulets too.

Several readers wrote that they liked the Christmas gift check list last year, so here's another list with the appropriate blanks. Don't forget to include those important sizes and colors.

Merry Christmas!

Camera _____	Binoculars _____
Film _____	Lantern _____
Ammo _____	Dutch oven _____
Sleeping bag _____	Knife _____
Bird feeder _____	First-aid kit _____
Bug dope _____	Book _____
Down jacket _____	Shoes _____
Flashlight _____	Kit bag _____
Dried food _____	Turkey caller _____
Camp stove _____	Shirt _____
Compass _____	Or _____?

Eddie Bauer, Inc.
1737 Airport Way S.
Seattle, Wash. 98134

L. L. Bean Inc.
Freeport, ME 04032

D-Boone Enterprises, Inc.
Box 8
Highspire, PA 17043

Lowrance Electronics Mfg. Corp.
12000 E. Skelly Dr.
Tulsa, OK 74128

Normark Corp.
1710 E. 78th St.
Minneapolis, Minn. 55423

Orvis Co., Inc.
Manchester, VT 05254

Penns Woods Products, Inc.
19 W. Pittsburgh St.
Delmont, PA 15626

Norm Thompson
1805 N.W. Thurman
Portland, Oregon 97209



At Edinboro . . .

Pro-Am Shoot in Plaid

By Keith C. Schuyler

Photos from the Author

WHEN FIRST announcement of the Scottish Pro-Am Archery Festival sifted through the junk mail on my desk back in May, 1975, the figure of $8000 caught my eye. If Scots are known for anything, it certainly isn't reckless spending, yet this was a lot of money.

Further reading revealed that this was not only a big event in Edinboro, a small Erie County town, but also the second largest professional shoot in the entire United States. Value of the awards to be given averaged $1.60 for every man, woman and child in the community that abuts a good fishing lake of the same name. No matter how you looked at it, the thing was interesting.

Bernic Fuller, chairman of the event, was prompt to fill in background data, and I programmed my station wagon for a trip to Edinboro on July 25, registration day.

Backing the event as a project was the Edinboro Lions Club with the endorsement of Stuart E. Long, president. Mayor Alton A. Huntley supported the event with a proclamation that included a most appropriate whereas: "Archers have demonstrated outstanding self-discipline, sportsmanship and loyal friendship to their competitors and citizens of the borough. We are pleased to welcome the finest archers in the country to this community."

Actually the Pro-Am tournament is not new to the northwestern part of the state, for it was started in Corry some years ago. In 1974, it was moved to Edinboro to take advantage of facilities provided by Edinboro State College. To maintain the element of success that has typified past tournaments, Diane Miller, former state champ, was retained as tournament director. Wisdom of the choice was confirmed when the participants voted Diane the archery personality of the tournament in the final day awards ceremony. Her contribution to activities might be characterized as something a step ahead of a runaway buzz saw.

Second biggest and second most profitable to archers, the tournament was only slightly affected by current economics and gasoline prices. One hundred thirty participants registered

from as far away as California. Headliners included Johnny Williams, native of Cranesville, who currently resides in California where he is a representative for the Wing Archery Co. His female counterpart on the professional archery circuit, Ann Butz of New York, was also in contention to provide the toughest type of competition for the money shooters. But, there were some surprises.

A most pleasant surprise for all attending the tournament for the first time was the excellent accommodations at Edinboro State College as well as shooting facilities. Dormitories were open for visiting archers, and the charge was but $12.50 per day including three meals! Registration opened at Edinboro State football stadium at noon on July 25. Early arrivals could practice on the field from noon until 8 p.m. A meeting of the Professional Archers Association was scheduled for that evening at Riverside Inn.

Edinboro's history goes back to 1798, when a group of Scottish immigrants settled on the banks of Conneauttee Lake, now known as Lake Edinboro. Actually, Edinboro was named after the capital city in Scotland, Edinburgh, but the spelling was adapted to the pronounciation of the original. This collection of fewer than 500 farmers showed little population growth until after World War II. In the last 15 years the population has risen 137 percent, largely because of the attraction that Lake Edinboro itself provides. This water first was used for agriculture, and at the turn of the century it provided a source of power for a grist mill constructed at the outlet. In the early 1940s, the western shore was built into a summer community, and today the town is a pleasant combination of a resort and a college community. The college itself, with an enrollment of 7000, is an outgrowth of an academy established in 1857.

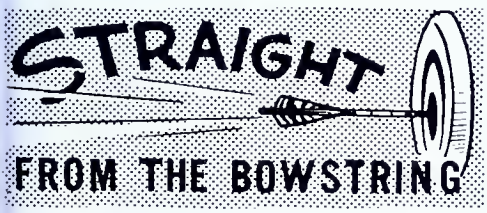
Edinboro, just off Route 79 between Meadeville and Erie, went all out for the event with a sidewalk sale and a summer craft show. Besides a full archery program with extra events, fishing, swimming, boating, golf and other activities were available.

As Expected

In the first day round, scores shaped up somewhat as expected. John Williams, Olympic champ who holds more records than the average music store, was looking good with a fat 298 out of a possible 300. However, standing right beside him was Tim McKinney, Indiana sharpshooter, also with a 298. Neither archer could feel comfortable, however, for Art Lizzio, Hugh Shaw and Ed Rohde were not far behind with 296s. In fact, at the end of the day with 79 men on the line, only eight points separated the top twenty pros.

Ann Butz seemed to have things fairly well in hand among 17 professional lady archers, but her margin of 6 points over Denise Libby would not permit her to get careless in the final round. Betty McKinney, mother of the young man sharing the lead with John Williams, was in contention with a 282, four points behind Judy Webber at 286. Next closest lady was 14 points off the pace and it was fairly certain that top money would be in the quartet with the biggest margin.

Saturday, the first full day of shooting, provided pleasant if warm weather, and the shooting was under faultless skies. Spectators, who had use of the large bleachers behind the shooting line in the stadium, could follow the scores as they were posted by members of Edinboro College's Sigma Sigma sorority, as they became available. The girls fully exemplified the tradition of their college with typical Scottish plaid outfits complete with rakish tams. Keeping track of



scores and other statistics were Stu Long, Ross Morrow, Jan Long, Judy Morrow, Ruth Fuller, Gi Fuller and Dot Gorman. Bernie Fuller was assisted by Stu Long, Jerry Petit, Dale Gorman, Ross Morrow and Ken Fuller. Bill Miller and Harry Glunt handled the tickets and Steve Lucas and Dick Anderson provided liaison with the eollege itself.

The second day dawned clear and sunny, but there was a difference. A strong varying breeze moved in from the west, and it brought problems, particularly for those with lightweight bows. Wind can also have an effect upon the tall, lean archers who have more difficulty with body sway than the short, stoeky types. As the day wore on, the breeze inereased in intensity and made shooting rough, espeeially at the longer ranges.

Effects of the wind were notable. Among the professional men, the seores of the top twenty were down from those of the first day. Johnny Williams dropped 10 points, but the wind cost Tom MeKinney only 8 fewer counters; the differenee was enough to put him in top position.



SUE TERWILLIGER, member of the Tri-Sigma sorority, displays big smile and traditional Scottish plaid as she records scores.

Tom Kennedy proved an exeeption, adding 2 points to his first day's score, while Doug Brothers was dropping 12. This brought Tom within 4 points of the leader, but it was not enough to rate first place although he did reverse earlier positions with David Hryn who came in third in the final tally. Jack Scott, who was within 2 points of Doug the first day, lost 20 points in the wind.

Denise Libby added 3 points to her first-day score to eome within 2 of tying Ann Butz. Ann dropped 7 points in the wind, but her first-day 291 was enough to keep her in charge. Sali Holmantoler and Treasa Brothers maintained their one, two, positions, although each dropped points on the second day.

Junior Participants

With regular tournament shooting scheduled to end at 4 o'clock on the first day, a section was set up for Junior Olympie archery partieipants. The turnout was somewhat disappointing. Neverthelcss, the tournament was held as seheduled to enable these youngsters an opportunity to post offieial scores.

Entry fees for the professionals werc a bit salty at $50, but the many cash awards and merchandise prizes madc it a good gamble. Top money in the Men's Opcn was $400 with an additional $225 added for members of the Professional Archers Association. Second money was $300 plus $175, with third place good for $225 plus $150. PAA extra money went to the first ten places, with a minimum addition of $50 for tenth place to make that position worth $140 for the winner. Sponsors also provided cash awards for the next eleven places, beginning at $85 and reducing to $40 for the twentieth position.

In the Women's Open, first place brought sponsored money of $225 plus $125 for PAA card carriers. Second was good for a eombined purse of $215, and third plaee brought $180. PAA money was provided for the first five plaees and a sixth position

Top Scores

Professional Men

Tim McKinney 298, 292 — 590
Yorktown, Ind.
John Williams 298, 288 — 586
Rialto, Calif.
Chuck Jordan 292, 291 — 584
Hastings, Mich.

Professional Ladies

Ann Butz 291, 284 — 575
Corning, N.Y.
Denise Libby 285, 288 — 573
Rancho Cordova, Calif.
Betty McKinney 282, 267 — 549
Yorktown, Ind.

Amateur Men

Doug Brothers 295, 283 — 578
Sharonville, Ohio
Tom Kennedy 286, 288 — 574
Butler, Penna.
David Hryn 289, 282 — 571
Wect Seneca, N.Y.

Amateur Ladies

Sali Helmantoler 262, 255 — 517
Monongahela, Penna.
Treasa Brothers 259, 251 — 510
Sharonville, Ohio
Terry Ann Weis 256, 242 — 498
Elizabeth, Penna.

earned $50 from the sponsor. In addition, there was $3,500 in handicap awards.

Attractive trophies were awarded for the first three places in both men's and women's amateur standings. A special Executive Sportsman award was given for the highest scoring man and women in the Open Class.

In addition to cash awards, some extremely valuable handicap awards were presented. In all, there were forty prizes topped by a Honda "70" motorcycle from Street, Track and Trail. The Lions Club offered a 12-ft. fiberglass boat, and a Phoenix bow came from Pro-Line. Other prizes included a week for two at a guest ranch in Colorado, another 12-ft. boat, various bows, bicycles, saws, wrenches, knives and gift certificates.

Consequently, those who were not in on the money still had a chance for prizes considerably in value above many of the cash awards. Presentations followed Sunday's shoot-off in the Edinboro College field house.

One of the highlights of the first day was the opening ceremony. Among the dignitaries were Congressman Joseph P. Vigorito, Council President Gregory Lessig, Mayor Huntley, Edinboro College President Chester McNerney, Lions Club President, Long, and Father Leon Doleski. Another big event was the dinner and dance held at the Riverside Inn, Cambridge Springs, on Saturday evening. Highlight of the socializing was the crowning of Joyce Otter of Hemlock, Mich., as Queen of the Tournament. She was selected by the committee in charge. Appropriately enough, the crown was made of typical Scottish



ANN BUTZ, top-rated ladies' professional archer, successfully fought off challenge by Denise Libby, an outstanding performer from California.



TOURNAMENT director Diane Miller pauses for a moment to talk things over with Bernie Fuller, chairman of the Scottish Pro-Am Festival.

plaid. Joyce wore it throughout the second day of the shooting.

Although professional archery is yet in its comparative infancy, the attraction provided by tournaments of this nature cannot help but be healthy for the total sport. The pressure is undoubtedly heaviest at such a shoot, but rewards make it worthwhile for those who are able to compete at this level. It was interesting to note that compound bows were not permitted nor were releases allowed on the competitive line.

Although cash awards were the big attraction at this PAA-sanctioned event, the presence of 23 top amateur archers added to the interest as well as the awards.

However the individual might regard professionalism in any sport, it is a matter of fact that cash has been one of the greatest motivations in the establishment of any sport in the public eye. There is no letdown in archery ethics, since professionalism is still carried to its ultimate degree in sportsmanship as well as money matters. This writer knows of no archer who came straight into the professional ranks without first becoming established as an amateur. It is a natural move for those who win too easily and find that they no longer have room for all the trophies they bring home as amateurs. Money doesn't take up much space.

Yes, Virginia, there will be a 1976 Scottish Pro-Am Tournament sponsored by the Lions Club at Edinboro State College. And whether you shoot for profit or purely pleasure, there will be a place for you on the line. Take the family along; there is plenty to do in and around Edinboro.

Scoring Program To Be Held in 1976

The sixth Big Game Scoring Program will be held by the Pennsylvania Game Commission during the spring of 1976. Precise times and locations will be announced. This reminder is published so that successful bear and deer hunters will remember to preserve their trophies and have them measured during the upcoming sessions.

The Game Commission's measuring program, which scores trophies taken legitimately in Pennsylvania, was begun in 1965 and held in alternate years until 1973. As the backlog of older trophies dropped off, the number of entries decreased. Therefore, instead of holding a measuring program in 1975, when it normally would have fallen, it was delayed until 1976. Bear skulls and deer antlers are scored according to a system developed by the Boone and Crockett Club. This system takes into account the size of bear skulls and both the size and symmetry of antlers; thus it permits an objective ranking of different individuals of a species.

Yesteryear's hunter didn't have insulated boots, four-wheel-drives or plush hunting camps, but he was generously blessed with some . . .

Terrific Big Game Cartridges

By Don Lewis

Photos by Helen Lewis

YOUNG George Stivason glanced at the sinking afternoon sun and wondered how long it would take him to cover the two miles to camp. Swinging up from Saunders Run in the Caledonia area, George took a breather on a large rock overlooking Porky Pine Hollow. He was tired and his body ached from the many miles he had covered. This was his last day to hunt, and as he placed a nearly new Model 14 35 Remington across his lap, he contemplated the fact he might not connect this season. He spent a few seconds admiring the Model 14 that had dropped three bucks in three years, and he had no regrets over spending $38 for the new pump. His admiring glances were brought to a sudden end when two shots rang out on the ridge above. The sound of crashing brush froze George to the rock.

Before he could collect his senses, a legal buck plowed by not 10 yards away and headed for the hollow below. George shoved off the safety and flipped the rifle to his shoulder in one smooth movement and cut loose before the buck traveled 30 yards. A second shot only added speed to the big whitetail, and the third swerved the buck toward a clearing 60 yards away. This was his last chance and the young hunter knew it was now or never. George swung on the bounding buck as it hit the opening and sent the fourth 200-grain soft nose on its way, but the white flag stayed high and then faded from view.

George was crestfallen. As he fed four live rounds into the Model 14, he mentally fired each shot again.



AS OWNER George Stivason watches, Lewis examines old slide action M14 Remington which has proved so dependable a deer killer in 35 cal.

It was hard for him to believe every shot missed, but the big 200-grain slug should have sent the buck tumbling if one had connected. Putting the rifle on safe, he headed downhill, determined to search hard for a buck he believed he'd hit. His efforts paid off. Seventy-five yards from the clearing brought George to a fine 5-point.

While congratulating himself, George found that two shots had connected, but only one in a fatal area. This was still good shooting for a young hunter. George unloaded the

35 Remington pump and laid it on a rock, thinking it was the best rifle in Pennsylvania. Little did he realize then that in the next 23 years this Model 14 would down 23 bucks for him, nor did he know that his hunting career would see 45 bucks and one black bear fall to his shooting skill with the Model 14.

When George Stivason was matching his shooting skill with the 5-point back in 1931, big game hunting was quite different than today. Really, it was a matter of strength and endurance. Five-buckle arctics and felt pacs were in vogue as foot warmers, but many camps were mere shelters from the elements. My good stock-making friend, Randall Fredericks, spent a number of seasons hunting from a tent that had straw piled six inches thick for a floor. The hunter left camp before morning light with a couple of sandwiches and returned after dark with miles on his weary legs.

Reliable Guns

Despite all the hardships of that period insofar as comfort went, the hunter was not at a disadvantage in the firearm category; he did have reliable guns. The Remington Model 14 35 Remington was just one of the great game getters. Winchester's Model 86 take down lever action chambered for the 33 Winchester and famous 45-70 cartridges gave some stiff competition to Winchester's Model 95 lever outfit that could handle the 30-06 and the big 405 Winchester. And I well remember Winchester's Model 92 lever for the 38-40 cartridge; its full magazine held a double handful of shells. But Winchester's Model 94 in the 30-30 outlasted them all and is still a favorite today.

There's no question the lever action rifle was the number one type used back then. Marlin joined forces with the 93S carbine chambered for both the 30-30 and 32 Special. It lacked a full magazine, but its two-thirds tube held five shots. Since it was a side ejection with a solid top, I always think of it as the forerunner to Marlin's 336 lever outfit.

One of the most dominating levers of that period was the 99 Savage. This model was introduced prior to World War I and has withstood the test of time. It was chambered for the Savage 22 High Power centerfire, the 30-30, 303, 250-3000, and the 300 Savage. Only the 300 cartridge survived the pressures of competition, although Savage recently reintroduced the 250-3000 in the 99 Model. This might bring back a bit of nostalgia, but I don't foresee a great surge of popularity for this cartridge. Perhaps it's not fair to the 250-3000, but I feel its greatest contribution was the fact that its excellently proportioned case was necked down to accept the .224" bullet and the 22-250 cartridge was born.

The lever action may have dominated the hunting scene back then, but the pump was the favorite of many hunters. Strange as it may seem, the pump rifle of a few decades back almost automatically meant the 35 Remington load, although the Model 14 was also chambered for several other cartridges. On the other hand, mentioning the 35 caliber brings to mind just the Remington pump even though there were other 35 calibers that weren't as popular. For instance, the 35 Whelen, named for Colonel Townsend Whelen, was made by necking up the 30-06 case. This made a fine medium-range load for America's biggest game, for heavy, large-diameter bullets could be used in regular length actions such as the Springfield and Mauser. Another 35 that fell by the wayside was the ever bigger 35 Newton.

In the early 1930s, Colonel Whelen modified and revised the Springfield

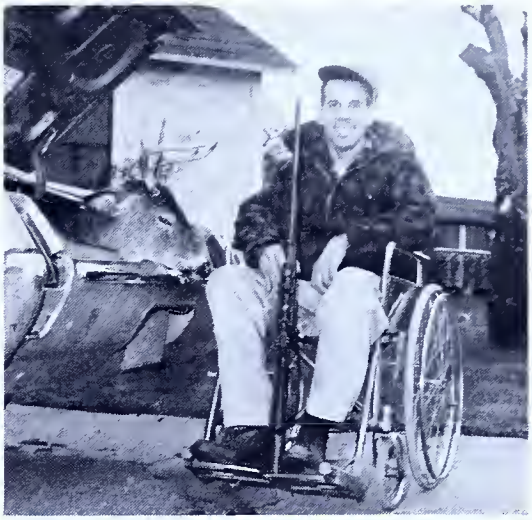


1903 into a sporter which turned out to be a fine hunting rifle. This bolt action '06 was equipped with the famous Lyman 48 receiver sight and a special matted ramp front sight that boasted the Lyman ivory or gold bead. The front bead was protected by a hood that could be removed by pushing a button on the side of the ramp. Dressing it up further with a knurled bolt handle, matted receiver top and polished bolt, it came complete with a fancy curly walnut stock built to Colonel Whelen's precise specifications.

This fancied up job wasn't cheap, running from $120 to $150. There was no question it was the ultimate in a hunting rifle then, but many hunters of that period settled for Remington's Model 30S bolt action which was offered in the same 30-06 caliber. It, too, was equipped with the Lyman 48 rear sight, and believe it or not, had a high comb stock. The 30S de luxe had a high price of $60, but the Model 30 was very plain with ramp type sights and cost just under $50.

I think I've covered enough ground to show the post-World War I hunter had a fair selection of rifles and cartridges to choose from. It is important to note the trend was for the heavy bullet and short range shooting. I'm not putting the 30-06 in short range category, but it wasn't as popular as the 35 Remington, 30-30 Winchester and the 32 Special. Most big game hunting was done in heavy cover and at close range. Scopes were available, but few hunters wanted or needed one. The ultimate short-range, heavy-bullet cartridge appeared in Winchester's 348, chambered in the Model 71 lever action. It's often stated that the Model 71 is a revised version of Winchester's Model 1886 and the 348 cartridge sprang from the Winchester 33. This all may be true, but my feeling is that the Model 71 reflects the finest in style and craftsmanship of all the lever actions.

The 348 may have suffered its quick demise because it is very powerful both frontwards and backwards. Or



TOM HOOKS with nice buck taken in western Pennsylvania. Older loads such as "Granddad" 30-06 and 25 Niedner do as well on deer as any of today's magnums.

it could have been the advent of Winchester's Model 70, which came out a year after the introduction of the Model 71. My own thinking runs along both lines. The 348 cartridge is not all that bad recoil-wise, and the appearance of a very fine bolt action rifle may have been a breath of fresh air to the hunter weary of the array of repeaters such as the lever and pump.

The bolt action may have stayed in the background partly because the rimmed shell that held centerstage then was not suited for the bolt. This may be going well out on the limb, but it's true the rimmed case does not adapt well to bolt actions. I'm sure there is some truth in this, but the most likely theory is the lever and pump offered firepower without lowering the rifle from the shoulder. This can be done with a bolt action, and it's the proper way to shoot, but the majority of bolt users drop the rifle to work the action. Also, the carbine style of many lever actions has the physical appearance of being suited for the dense brush and heavy vegetation encountered by the hunter. Advertisements often depicted a hunter face to face with a big bear or mountain lion, and the fast action lever always completed the picture.

This was the thinking of that day, and could have been the reason lever actions outnumbered other designs five to one.

When I interviewed my longtime friend George Stivason, he was quick to point out the need for the heavy 200-grain slug in the 35 Remington. His thinking has changed through the years, and his last 10 or 15 bucks were taken with other cartridges using lighter bullets, but in the heyday of his famous 35, the heavier the bullet the better off the hunter felt. In all fairness, those fellows did hunt in heavy cover, and I can appreciate George's feelings toward the big 200-grain slug.



RAY JOHNS and Lewis drag out whitetail buck taken with M760 Remington chambered for another cartridge that's getting on in years—the 270.

Maybe it wouldn't be a bad idea to step back a moment in time and reflect a little on yesteryear's hunting philosophy in the big game department. A hunter was more or less on his own then. The big woods represented a challenge not only to his skill with a rifle, but also to his ability to wander through thousands of acres of nearly inaccessible, uncharted woodland. The whine of the all-terrain vehicle was unheard of, and the hunter walked. It was necessary to learn the land one hunted and, for the most part, the hunter got his buck due to his own efforts and hunting skills. The elusive buck was given a lot of credit for being a true match for any hunter, and there was an honest right to mount a trophy head for display above the mantle in the hunter's home.

Different Now

I won't for the world downgrade the modern hunter nor make insinuations that today's hunting is easy and getting a buck is just standing a few yards from a highway waiting for one to drift by. I'm sure that's done, but tens of thousands of men and women who hunt in Pennsylvania give it an all-out effort. Still, it's true some things have changed, and I think it fair to admit we have many more conveniences and hunting lands available than ever before. The way we hunt is far different, too. I enjoy using the Ruger No. 1 single shot in the Remington 7mm Magnum cartridge, but probably few hunters of the 1930s would have shared my enthusiasm. There were few places the long range ability of the Magnum could have been utilized then. Not every deer in that period was dropped at a scant 20 yards, but the rough terrain the wary bucks stuck to was so dense it voided any chance for long shooting.

Today, the thinking runs along the lines of power and speed. Since handloading has become so popular, the quest for speed runs deep in every handloader. When I broke into the handloading game, I dreamed of super hot cartridges that offered smashing power. I definitely wanted to get away from the slowpoke cartridges of the pre-war years, and this was exactly what I thought they were. When I began to group shoot my handloads (as every handloader worth his salt should do) against factory stuff and run them both through the chronograph, I made the startling discovery that I wasn't gaining a whole lot. True, I could up the velocity a bit, and I could work up a load for a

given rifle that would outperform factory fodder, but it wasn't long until I saw the folly of my ways. When the truth ricocheted through my brain, I began striving for loads that offered accuracy with just enough speed to handle a long shot. Surprisingly, this was about the same thing the factory round offered.

The old-timer didn't have a maze of ballistic literature at his fingertips, and he couldn't wile away an hour in the basement reloading last year's cases. What he shot, he bought, but in this category I have to put him on par with the modern hunter. He sure didn't suffer from the lack of power. The impressive hunting careers of veteran hunters such as George Stivason are living proof the cartridges used then had all the punch needed.

Few "New" Cartridges

Other than a few new Magnums, the modern hunter does not have an entirely different array of cartridges to choose from. Some of the old-timers have fallen by the wayside, but this goes for a few of the new ones like Winchester's very fine 284. Perhaps I shouldn't raise my voice in defense of a cartridge that couldn't hang in there with the 6mms, but be that as it may, the 284 cartridge is far superior to the 6mm as a big game load and, in fact, is a better "combination" cartridge. Getting back to cartridge controversy, brings us to the fact today's hunter is using many pre-World War II cartridges in their original form or a modified version.

The 25-06 started out as a 25 Niedner in the 1920s and was actually a 30-06 cased necked down for the .257" bullet. In 1969, Remington put it into production on basically the same design, and there's not much new about that. While the 308 Winchester has really made a name for itself, it doesn't have as much to offer as the old 30-06. Speaking of the 30-06, it's still the basic case, and several other cases can be made from the '06 by just modifying the neck size. A few other cartridges can be made from the old military case by using extensive steps to alter the case.

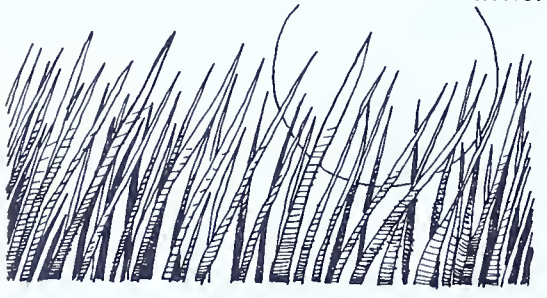
Similar Cartridges

Let's face it. For all practical purposes, we are using similar cartridges. Secondly, the modern cartridge with the exception of several big Magnums doesn't offer the hunter a lot more than the shells our granddads used. The belief the old cartridge was inadequate is false. When a hunter stopped me to admire my Ruger No. 1, he was chagrined I was using the old 7x57 Mauser (7mm). He told me it was outdated and inadequate. The 1931-32 edition of Stoeger's *Arms and Ammunition* shows the 175-grain 7x57 slug with a muzzle velocity of 2300 fps. The 140-grain slug I was using in front of 42½ grains of 4064 cruised out the muzzle at 2800 fps. That's not too far in speed from the modern 308 150-grain slug that moves along around 2900 fps with the same powder charge.

The Magnums have livened up the velocity figures a bit, but the same cartridges George and his contemporaries used still are around and have plenty to offer. I might go one step farther by saying many a hunter this season would be better off with a 270 Winchester or 30-30 Winchester or even the old 35 Remington instead of a powerhouse Magnum. Have no fears, the 270, 30-06 and 30-30 may be old, but they will retain their popularity for a long, long time. It's like I said in the beginning, the hunters of yesteryear had a good many disadvantages to contend with, but one thing for sure, they did have fine rifles and terrific big game cartridges to carry into the deer woods.

In the wind

chuck fergus information writer



A judge in the Department of the Interior's Office of Hearings and Appeals has recommended that the moratorium on the taking of Pacific walrus be lifted and that management of this animal be returned to the State of Alaska under a joint federal/state management program.

Over a million square miles of formerly inaccessible Arctic goose breeding territory can now be checked by two earth satellites, helping biologists forecast nesting success and autumn flights of geese over North America. This year, U.S. and Canadian biologists used pictures from the two independent sensing systems—a weather satellite launched for the National Atmospheric and Oceanic Administration and an Earth Resources Technology satellite launched for the Interior Department. The satellite systems check snow and ice conditions over wide areas.

In a recent government study issued by the Joint Economic Committee of Congress, it was estimated that pollution control expenditures will average only 0.7 percent of the gross national product for the period 1973-1982. On the other hand, 50,000 new jobs have been created by federally financed sewage treatment plants alone.

Most game and nongame management programs are conducted on the state level with funds obtained from hunters and fishermen. A proposal to increase money spent on protection of nongame animals—by indirectly taxing nonhunting users of public lands—is being studied by the Council on Environmental Quality and the U.S. Fish and Wildlife Service. Items considered for taxing include recreational vehicles, camping equipment and some photographic gear.

Total world generation of pollutants could be four times higher in the year 2000 than it was in 1970, according to preliminary results of a United Nations sponsored study. Using different scenarios of future economic growth, a team of Brandeis-Harvard economists predicts the most rapid rise in pollutant generation will occur in the Third World

The grizzly bear has been listed as a threatened species in the lower 48 states by the U.S. Fish and Wildlife Service. The action means that the grizzly now is protected by federal law as well as by law in the states it inhabits. Although the grizzly population has remained fairly stable for the last 50 years, the FWS report states that increasing human activity such as road building and developments that affect the grizzly's remaining habitat prompted the move.

Whooping cranes that winter on Matagorda Island on the Texas gulf coast may not be bothered by military operations in the future, as the U.S. Air Force and Navy will cease practicing bombing and landing runs on the island. The Interior Department plans to turn about 4000 acres of the island into a refuge for the cranes, of which only 49 are known to exist in the wild.

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